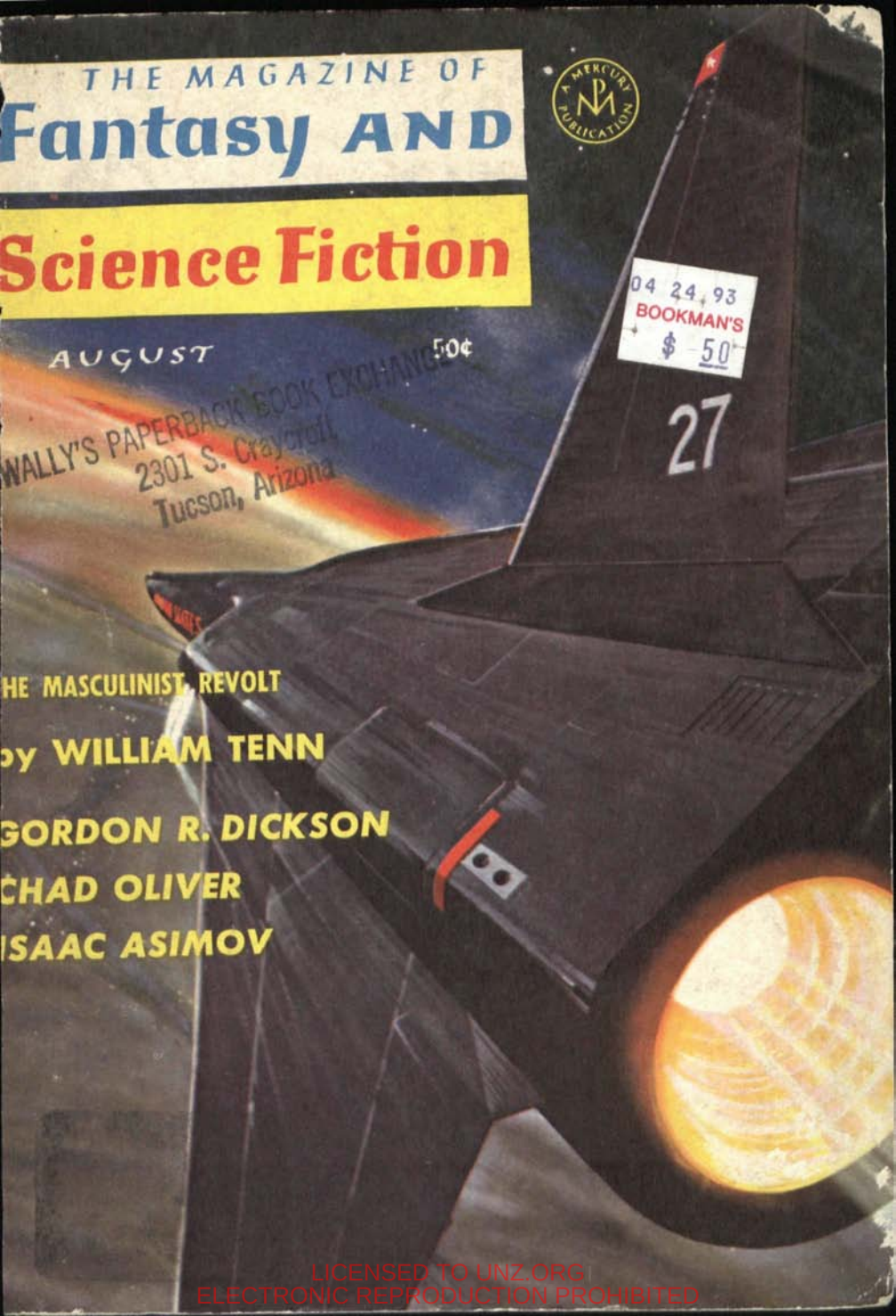

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Fantasy and Science Fiction

AUGUST *Including Venture Science Fiction*

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There has been some fuzzy discontent lately about the "masculinization of American women," ranging from minor grumblings about boots and pants to confused enmity about economic competition. As is often the case, it remains for science fiction to state the case with startling and needle-sharp hostility . . . er, that is, clarity. *It is not this magazine's policy to be constantly turning up lights under simmering waters, but when a good story thrusts us into the role of agitator, we accept it. William Tenn's first appearance here since EASTWARD HO! (October 1958) is that type of story. Mr. Tenn assures us that he was just having fun with this wild and witty extrapolation of the cold war between the sexes, and that he has no chip on his shoulder. We trust that our readers will take his commentary in the same spirit. (Madam, is that a smile, or are you gritting your teeth?)*

THE MASCULINIST REVOLT

by William Tenn

I: THE COMING OF THE CODPIECE

HISTORIANS OF THE PERIOD between 1990 and 2015 disagree violently on the causes of the Masculinist Revolt. Some see it as a sexual earthquake of nation-wide proportions that was long overdue. Others contend that an elderly bachelor founded the Movement only to save himself from bankruptcy and saw it turn into a terrifying monster that swallowed him alive.

This P. Edward Pollyglow—fondly nicknamed "Old Pep" by his followers—was the last of a family distinguished for generations in the men's wear manufacturing line. Pollyglow's factory produced only one item, men's all-purpose jumpers, and had always operated at full capacity—up to the moment the Interchangeable Style came in. Then, abruptly, overnight it seemed, there was no longer a market for purely male apparel.

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He refused to admit that he and all of his machinery had become obsolete as the result of a simple change in fashion. What if the Interchangeable Style ruled out all sexual differentiation? "Try to make us swallow that!" he cackled at first. "Just try!"

But the red ink on his ledgers proved that his countrymen, however unhappily, *were* swallowing it.

Pollyglow began to spend long hours brooding at home instead of sitting nervously in his idle office. Chiefly he brooded on the pushing-around men had taken from women all through the twentieth century. Men had once been proud creatures; they had asserted themselves; they had enjoyed a high rank in human society. What had happened?

Most of their troubles could be traced to a development that occurred shortly before World War I, he decided. "Man-tailoring," the first identifiable villain.

When used in connection with women's clothes, "man-tailoring" implied that certain tweed skirts and cloth coats featured unusually meticulous workmanship. Its vogue was followed by the imitative patterns: slacks for trousers, blouses for shirts, essentially male garments which had been frilled here and furbelowed there and given new, feminine names. The "his-and-hers" fashions came next; they were universal by 1991.

Meanwhile, women kept gaining prestige and political power. The F.E.P.C. started policing discriminatory employment practices in any way based upon sex. A Supreme Court decision (Mrs. Staub's Employment Agency for Lady Athletes *vs.* The New York State Boxing Commission) enunciated the law in Justice Emmeline Craggly's historic words: "Sex is a private, internal matter and ends at the individual's skin. From the skin outwards, in family chores, job opportunities, or even clothing, the sexes must be considered legally interchangeable in all respects save one. That one is the traditional duty of the male to support his family to the limit of his physical powers—the fixed cornerstone of all civilized existence."

Two months later, the Interchangeable Style appeared at the Paris openings.

It appeared, of course, as a version of the all-purpose jumper, a kind of short-sleeved tunic worn everywhere at that time. But the men's type and the women's type were now fused into a single Interchangeable garment.

That fusion was wrecking Pollyglow's business. Without some degree of maleness in dress, the workshop that had descended to him through a long line of manufacturing ancestors unquestionably had to go on the auctioneer's block.

He became increasingly desperate, increasingly bitter.

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One night, he sat down to study the costumes of bygone eras. Which were intrinsically and flatteringly virile—so virile that no woman would dare force her way into them?

Men's styles of the late nineteenth century, for example. They were certainly masculine in that you never saw a picture of women wearing them, but what was to prevent the modern female from doing so if she chose? And they were far too heavy and clumsy for the gentle, made-to-order climates of today's world.

Back went Pollyglow, century by century, shaking his head and straining his eyes over ancient, fuzzy woodcuts. Not this, no, nor that. He was morosely examining pictures of knights in armor and trying to imagine a mailed shirt with a zipper up the back, when he leaned back wearily and noticed a fifteenth century portrait lying among the pile of rejects at his feet.

This was the moment when Masculinism began.

Several of the other drawings had slid across the portrait, obscuring most of it. The tight-fitting hose over which Pollyglow had bitten his dry old lips negatively—these were barely visible. But between them, in emphatic, distinctive bulge, *between them*—

The codpiece!

This little bag which had once been worn on the front of the hose or breeches—how easily it could be added to a man's jumper! It was unquestionably, definitively male: any woman could wear it, of course, but on her clothing it would be merely a useless appendage, nay, worse than that, it would be an empty mockery.

He worked all night, roughing out drawings for his designers. In bed at last, and exhausted, he was still bubbling with so much enthusiasm that he forgot about sleep and hitched his aching shoulder-blades up against the headboard. Visions of codpieces, millions of them, all hanging from Pollyglow Men's Jumpers, danced and swung and undulated in his head as he stared into the darkness.

But the wholesalers refused the new garment. The old Pollyglow Jumper—yes: there were still a few conservative, fuddy-duddy men around who preferred familiarity and comfort to style. But who in the world would want this unaesthetic novelty? Why it flew in the very face of the modern doctrine of interchangeable sexes!

His salesmen learned not to use that as an excuse for failure. "Separateness!" he would urge them as they slumped back into the office. "Differentness! You've got to sell them on separateness and differentness! It's our only hope—it's the hope of the world!"

Pollyglow almost forgot the moribund state of his business, suffocating for lack of sales. He

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wanted to save the world. He shook with the force of his revelation: he had come bearing a codpiece and no one would have it. They must —for their own good.

He borrowed heavily and embarked upon a modest advertising campaign. Ignoring the more expensive, general-circulation media, he concentrated his budget in areas of entertainment aimed exclusively at men. His ads appeared in high-rated television shows of the day, soap operas like "The Senator's Husband" and in the more popular men's magazines—*Cowboy Confession Stories* and *Scandals of World War I Flying Aces.*

The ads were essentially the same, whether they were one-pagers in color or sixty-second commercials. You saw a hefty, husky man with a go-to-hell expression on his face. He was smoking a big, black cigar and wore a brown derby cocked carelessly on the side of his head. And he was dressed in a Pollyglow Men's Jumper from the front of which there was suspended a huge codpiece in green or yellow or bright, bright red.

Originally, the text consisted of five emphatic lines:

MEN ARE DIFFERENT FROM WOMEN!
Dress differently!
Dress masculine!
Wear Pollyglow Men's Jumpers
—with the Special Pollyglow Codpiece!

Early in the campaign, however, a market research specialist employed by Pollyglow's advertising agency pointed out that the word "masculine" had acquired unfortunate connotations in the last few decades. Tons of literature, sociological and psychological, on the subject of over-compensation, or too-overt maleness, had resulted in "masculine" being equated with "homosexuality" in people's minds.

These days, the specialist said, if you told someone he was masculine, you left him with the impression that you had called him a fairy. "How about saying, 'Dress masculin*ist*?'" the specialist suggested. "It kind of softens the blow."

Dubiously, Pollyglow experimented with the changed wording in a single ad. He found the new expression unsavory and flat. So he added another line in an attempt to give "masculinist" just a little more punch. The final ad read:

MEN ARE DIFFERENT FROM WOMEN!
Dress *differently!*
Dress *masculinist!*
Wear Pollyglow Men's Jumpers
—with the *Special Pollyglow Codpiece!*
(And join the masculinist club!)

That ad pulled. It pulled be-

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yond Pollyglow's wildest expectations.

Thousands upon thousands of queries rolled in from all over the country, from abroad, even from the Soviet Union and Red China. Where can I get a Pollyglow Men's Jumper with the Special Pollyglow Codpiece? How do I join the masculinist club? What are the rules and regulations of masculinism? How much are the dues?

Wholesalers, besieged by customers yearning for a jumper with a codpiece in contrasting color, turned to Pollyglow's astonished salesmen and shrieked out huge orders. Ten gross, fifty gross, a hundred gross. And immediately—if at all possible!

P. Edward Pollyglow was back in business. He produced and produced and produced, he sold and sold and sold. He shrugged off all the queries about the masculinist club as an amusing sidelight on the advertising business. It had only been mentioned as a fashion inducement—that there was some sort of in-group which you joined upon donning a codpiece.

Two factors conspired to make him think more closely about it: the competition and Shepherd L. Mibs.

After one startled glance at Pollyglow's new clothing empire, every other manufacturer began making jumpers equipped with codpieces. They admitted that Pollyglow had single-handedly reversed a fundamental trend in the men's wear field, that the codpiece was back with a vengeance and back to stay—but why did it have to be only the Pollyglow Codpiece? Why not the Ramsbottom Codpiece or the Hercules Codpiece or the Bangaclang Codpiece?

And since many of them had larger production facilities and bigger advertising budgets, the answer to their question made Pollyglow reflect sadly on the woeful rewards of a Columbus. His one chance was to emphasize the unique nature of the Pollyglow Codpiece.

It was at this crucial period that he met Shepherd Leonidas Mibs.

Mibs—"Old Shep" he was called by those who came to follow his philosophical leadership—was the second of the great triumvirs of Masculinism. He was a peculiar, restless man who had wandered about the country and from occupation to occupation, searching for a place in society. All-around college athlete, sometime unsuccessful prizefighter and starving hobo, big-game hunter and coffee-shop poet, occasional short-order cook, occasional gigolo—he had been everything but a photographer's model. And that he became when his fierce, crooked face—knocked permanently out of line by the nightstick of a Pittsburgh policeman—attracted the attention of Pollyglow's advertising agency.

His picture was used in one of

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the ads. It was not any more conspicuously successful than the others; and he was dropped at the request of the photographer who had been annoyed by Mibs' insistence that a sword should be added to the costume of derby, codpiece and cigar.

Mibs knew he was right. He became a pest, returning to the agency day after day and attempting to persuade anyone at all that a sword should be worn in the Pollyglow ads, a long, long sword, the bigger and heavier the better. "Sword man is here," the receptionist would flash inside, and "My God, tell him I'm not back from lunch yet," the Art Director would whisper over the intercom.

Having nothing else to do, Mibs spent long hours on the heavily upholstered couch in the outer office. He studied the ads in the Pollyglow campaign, examining each one over and over again. He scribbled pages of comments in a little black notebook. He came to be accepted and ignored as so much reception room furniture.

But Pollyglow gave him full attention. Arriving one day to discuss a new campaign with his account executive—a campaign to stress the very special qualities of the Pollyglow Codpiece, for which, under no circumstances, should a substitute ever be accepted—he began a conversation with the strange, ugly, earnest young man. "You can tell that account executive to go to hell," Pollyglow told the receptionist as they went off to a restaurant. "I've found what I've been looking for."

The sword was a good idea, he felt, a damn good idea. Put it in the ad. But he was much more interested in certain of the thoughts developed at such elaborate length in Mibs' little black notebook.

If one phrase about a masculinist club had made the ad so effective, Mibs asked, why not exploit that phrase? A great and crying need had evidently been touched. "It's like this. When the old-time saloon disappeared, men had no place to get away from women but the barber shop. Now, with the goddam Interchangeable Haircut, even that out's been taken away. All a guy's got left is the men's room, and they're working on that, I'll bet they're working on that!"

Pollyglow sipped at his glass of hot milk and nodded. "You think a masculinist club would fill a gap in their lives? An element of exclusiveness, say, like the English private club for gentlemen?"

"Hell, no! They want something exclusive, all right—something that will exclude women—but not like a private club one damn bit. Everything these days is telling them that they're nobody special, they're just people. There are men people and women people—and what's the difference anyway? They want something that does what the codpiece does, that tells

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them they're not people, they're *men*! Straight down-the-line, two-fisted, stand-up-and-be-counted *men!* A place where they can get away from the crap that's being thrown at them all the time: the women-maybe-are-the-superior-sex crap, the women-outlive-them-and-outown-them crap, the a-real-man-has-no-need-to-act-masculine crap—all that crap."

His eloquence was so impressive and compelling that Pollyglow had let his hot milk grow cold. He ordered a refill and another cup of coffee for Mibs. "A club," he mused, "where the only requirement for membership would be manhood."

"You still don't get it." Mibs picked up the steaming coffee and drank it down in one tremendous swallow. He leaned forward, his eyes glittering. "Not just a club—a *movement*. A movement fighting for men's rights, carrying on propaganda against the way our divorce laws are set up, publishing books that build up all the good things about being a man. A movement with newspapers and songs and slogans. Slogans like 'The Only Fatherland for a Man is Masculinity.' And, 'Male Men of the World Unite—You Have Nothing to Gain but Your Balls!' See? A movement."

"Yes, a movement!" Pollyglow babbled, seeing indeed. "A movement with an official uniform—the Pollyglow Codpiece! And perhaps different codpieces for different—for different, well—"

"For different ranks in the movement," Mibs finished. "That's a hell of a good idea! Say green for Initiate. Red for Full-Blooded Male. Blue for First-Class Man. And white, we'd keep white for the highest rank of all—*Superman*. And, listen, here's another idea."

But Pollyglow listened no longer. He sat back in his chair, a pure and pious light suffusing his gray, sunken face. "None genuine unless it's official," he whispered. "None official unless stamped Genuine Pollyglow Codpiece, copyright and pat. pending."

Masculinist annals were to describe this luncheon as the Longchamps Entente. Later that historic day, Pollyglow's lawyer drew up a contract making Shepherd L. Mibs Director of Public Relations for the Pollyglow Enterprises.

A clip-out coupon was featured in all the new ads:

WANT TO LEARN MORE ABOUT MASCULINISM?
WANT TO JOIN THE MASCULINIST CLUB?
Just fill out this coupon and mail it to the address below. Absolutely no charge and no obligation—just lots of free literature and information on this exciting new movement!
FOR MEN ONLY!

The coupons poured in and

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business boomed. Mibs became head of a large staff. The little two-page newsletter that early applicants received quickly became a twenty-page weekly, the *Masculinist News*. In turn, it spawned a monthly full-color magazine, the *Hairy Chest*, and a wildly popular television program, "The Bull Session."

In every issue of the *Masculinist News*, Pollyglow's slogan, "Men Are *Different* from Women," shared the top of the front page with Mibs' "Men Are as *Good* as Women." The upper left-hand corner displayed a cut of Pollyglow, "Our Founding Father—Old Pep," and under that ran the front-page editorial, "Straight Talk from Old Shep."

A cartoon might accompany the editorial. A truculent man wearing a rooster comb marched into cowering masses of hippy, busty women. Caption: "The Cock of the Walk." Or, more didactically, hundreds of tiny children around a man who was naked except for a huge codpiece. Across the codpiece, in execrable but highly patriotic Latin, the words *E Unus Pluribum*—and a translation for those who needed it, "Out of the one, many."

Frequently, a contemporary note was struck. A man executed for murdering his sweetheart would be depicted, a bloody axe in his hands, between drawings of Nathan Hale being hanged and Lincoln striking off the chains of slavery. There was a true tabloid's contempt for the rights or wrongs of a case. If a man was involved, the motto ran, he was automatically on the side of the angels.

"Straight Talk from Old Shep" exhorted and called to action in a style reminiscent of a football dressing room between halves. "Men are a lost sex in America," it would intone, "because men are being lost, lost and mislaid, in the country as a whole. Everything nowadays is designed to sap their confidence and lessen their stature. Who wouldn't rather be strong than limp, hard than soft? Stand up for yourselves, men of America, stand up high!"

There was a ready audience for this sort of thing, as the constantly rising circulation of the *Masculinist News* attested. From shower to washstand to wall urinal the word sped that the problems of manhood were at last being recognized, that virility might become a positive term once more. Lodges of the Masculinist Society were established in every state; most large cities soon boasted fifteen or more chapters.

Rank and file enthusiasm shaped the organization from the beginning. A Cleveland chapter originated the secret grip, Houston gave the movement its set of unprintable passwords. The Montana Lodge's Declaration of Principles became the preamble to the na-

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tional Masculinist constitution: ". . . all men are created equal with women . . . that among these rights are life, liberty and the pursuit of the opposite sex . . . from each according to his sperm, to each according to her ova . . ."

The sub-group known as the Shepherd L. Mibs League first appeared in Albany. Those who took the Albany Pledge swore to marry only women who would announce during the ceremony, "I promise to love, to honor and to *obey*" with exactly that emphasis. There were many such Masculinist sub-groups: The Cigar and Cuspidor Club, The Ancient Order of Love 'Em and Leave 'Em, The I-Owe-None-Of-It-to-the-Little-Woman Society.

Both leaders shared equally in the revenues from the movement, and both grew rich. Mibs alone made a small fortune out of his book, *Man: The First Sex,* considered the bible of Masculinism. But Pollyglow, Pollyglow's wealth was heaped up beyond the wildest dreams of his avarice—and his avarice had been no small-time dreamer.

He was no longer in the men's wear line; he was now in the label manufacturing business. He made labels to be sewed on to the collars of men's jumpers and inside the crowns of brown derbies, cigar bands for cigars and little metal nameplates for swords. One item alone did he continue to manufacture himself. He felt an enduring and warm affection for the little fabric container bearing the legend, *Genuine Pollyglow Codpieces*: it seemed to involve him in the activities of his fellow-men everywhere, to give him a share in their successes and their failures.

But everything else was franchised.

His imprimatur came to be needed, needed and paid for, on a vast variety of articles. No manufacturer in his right business mind would dream of coming out with a new model of a sports car, a new office swivel chair or, for that matter, a new type of truss, without having *Official Equipment—Masculinist Movement of America* printed prominently on his product. The pull of fashion has always been that of the stampeding herd: many men who were not card-carrying Masculinists refused to buy anything that did not bear the magic phrase in the familiar blue isoceles triangle. Despite its regional connotations, all over the world, in Ceylon, in Ecuador, in Sydney, Australia and Ibadan, Nigeria, men demanded that label and paid premium prices for it.

The much-neglected, often-dreamed-of men's market had come of age. And P. Edward Pollyglow was its worldwide tax collector.

He ran the business and built wealth. Mibs ran the organization and built power. It took three full years for a clash to develop.

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Mibs had spent his early manhood at a banquet of failure: he had learned to munch on suppressed rage, to drink goblets of thwarted fury. The swords he now strapped back on to men's bodies were always intended for more than decorative purposes.

Swords, he wrote in the *Hairy Chest,* were as alien to women as beards and mustaches. A full beard, therefore, and a sweeping handle-bar mustache, belonged to the guise of Masculinism. And if a man were bearded like the pard and sworded like a bravo, should he still talk in the subdued tones of the eunuch? Should he still walk in the hesitant fashion of a mere family-supporter? He should not! An armed male should act like an armed male, he should walk cockily, he should bellow, he should brawl, he should *swagger.*

He should also be ready to back up the swagger.

Boxing matches settled disputes at first. Then came fencing lessons and a pistol range in every Masculinist lodge. And inevitably, almost imperceptibly, the full Code Duello was revived.

The first duels were in the style of German university fraternities. Deep in the basement of their lodges, heavily masked and padded men whacked away at each other with sabers. A few scratches about the forehead which were proudly worn to work the next day, a scoring system which penalized defensive swordplay—these were discussed lightly at dinner parties, argued about in supermarkets.

Boys will be boys. Men will be men. Attendance at spectator sports began to drop sharply: didn't that indicate something healthy was at work? Wasn't it better for men to experience real conflict themselves than to identify with distant athletes who were only simulating battle?

Then the battles became a bit too real. When a point of true honor was involved, the masks and padding were dropped and a forest clearing at dawn substituted for the whitewashed lodge basement. An ear was chopped off, a face gashed, a chest run through. The winner would strut his victory through the streets; the loser, dying or badly wounded, would insist morosely that he had fallen on the radio aerial of his car.

Absolute secrecy was demanded by the Code Duello from all concerned—the combatants, seconds, officials and attending surgeons. So, despite much public outcry and hurriedly-passed new laws, very few duellists were ever prosecuted. Men of all walks of life began to accept armed combat as the only intelligent way to settle an important controversy.

Interestingly enough, swords in an open field at dawn were used mostly in the East. West of the Mississippi, the two duellists would appear at opposite ends of

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the main street at high noon, pistols holstered to their thighs. Advance warning would have emptied the street and pointedly suggested other locales for police officials. At a signal, the two men walked stiff-legged toward each other; at another signal, they pulled out their pistols and blazed away. Living and/or dead were then bundled into a station wagon which had been kept nearby with its motor running. At the local Masculinist Lodge there would be a rousing discussion of the battle's fine points as well as medical treatment and preparations for burial.

Many variations developed. The Chicago Duel had a brief and bloody vogue in the larger cities. Two cars, each driven by a close friend of the duellist sitting in the rear, would pass in opposite directions on the highway or a busy metropolitan street. Once abreast, foe could pound at foe with a submachine gun to absolute heart's content; but firing was expected to cease as soon as the vehicles had drawn apart. Unfortunately—in the intense excitement of the moment—few antagonists remembered to do this; the mortality rate was unpleasantly high among other motorists and open-mouthed bystanders, not to mention the seconds and officials of the duel.

Possibly more frightening than the Chicago Duel were the clumps of men—bearded, sworded, cigared and codpieced—who caroused drunkenly through the streets at night, singing bawdy songs and shouting unintelligible slogans up at the darkened windows of the offices where they worked. And the mobs which descended upon the League of Women Voters, tossing membership lists and indignant members alike pell-mell into the street. Masculinism was showing an ugly edge.

Pollyglow became alarmed and demanded an end to the uproar. "Your followers are getting out of hand," he told Mibs. "Let's get back to the theoretical principles of Masculinism. Let's stick to things like the codpiece and the beard and the cigar. We don't want to turn the country against us."

There was no trouble, Mibs insisted. A couple of the boys whooping it up—it was female propaganda that magnified it into a major incident. What about the letters he'd been receiving from other women, pleased by the return of chivalry and the strutting male, enjoying men who offered them seats in public conveyances and protected them with their heart's blood.

When Pollyglow persisted, invoking the sacred name of sound business practice, Mibs let him have it. He, Shepherd L. Mibs, was the spiritual leader of Masculinism, infallible and absolute.

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What he said went. *Whatever* he said went. Any time he felt like it, he could select another label for official equipment.

The old man swallowed hard a few times, little lumps riding up and down the tightly stretched concave curve of his throat. He patted Mibs' powerful shoulders, croaked out a pacifying pair of phrases and toddled back to his office. From that day on, he was a wordless figurehead. He made public appearances as Founding Father; otherwise, he lived quietly in his luxurious skyscraper, The Codpiece Tower.

The ironies of history! A new figure entered the movement that same day, a humble, nondescript figure whom Mibs, in his triumph, would have dismissed contemptuously. As Trotzky dismissed Stalin.

II: DORSELBLAD

Masculinists had rioted in a California town and torn down the local jail. Various pickpockets, housebreakers and habitual drunks were liberated—as well as a man who had spent eighteen years in the alimony section of the jail, Henry Dorselblad.

More than anyone else, Dorselblad was to give Masculinism its political flavor and peculiar idiom. Who that has heard it can ever forget the mighty skirl of ten thousand male voices singing—

"Oh, Hank Dorselblad is come out of the West,
Through all the wide Border his codpiece is best. . . ."

Hellfire Henry, Hank the Tank, Give 'Em Hell Henry, Damn 'Em All Dorselblad—this was a culture hero who caught the American imagination like no other since Billy the Kid. And, like Billy the Kid, Henry Dorselblad was physically a very undistinguished man.

Extremely short, prematurely bald, weak of chin and pot of belly, young Dorselblad had been uninteresting even as prey to most women. His middle-aged landlady, however, had bludgeoned him into matrimony when he was only twenty-two, immediately purchasing twelve thousand dollars worth of labor-saving household machinery on the installment plan. She naturally expected comfortable and diligent support thereafter.

Dorselblad fulfilled her expectations during several exhausting years by holding two full-time jobs and a part-time one on week-ends. He was a skilled programer for payroll computing machines: in his day, such men had each replaced two complete staffs of bookkeepers—they were well worth their high salaries and substantial job security. The invention of the self-programing payroll computer destroyed this idyllic state.

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At the age of twenty-five, Henry Dorselblad found himself technologically unemployed. He became one of the shabby, starving programers who wandered the streets of the financial district, their punching tools in their right hands, looking for a day's work in some old-fashioned, as yet unconverted firm.

He tried desperately to become a serviceman for the new self-programing computers. But twenty-five is an advanced age: personnel interviewers tended to classify him as "a senior citizen—junior grade." For a while, he eked out a bare living as a computer sweeper, clearing office floors of the tiny circular and oblong residues dropped by the card-punching machines. But even here, science and industry moved on. The punch-waste packer was invented, and he was flung into the streets again.

Her bank account shrinking at an alarming rate, Mrs. Dorselblad sued him for non-support. He went to jail. She obtained divorce with alimony payments set at a reasonably level—three-fourths of his highest recorded earning power. Unable to make even a token payment as a demonstration of good faith, he was kept in jail.

Once a year, a visiting panel of women judges asked him what efforts he had made in the past twelve months to rehabilitate himself. When Dorselblad cunningly evaded the question with a speech on the difficulties of looking for a job while in prison, he was given a severe tongue-lashing and remanded to the warden for special punishment. He became bitter and sullen, a typical hardened alimony criminal.

Eighteen years passed. His wife married three more times, burying two husbands and jailing the third for non-support. His responsibilities in no way affected by the vicious negligence of his successors, Henry Dorselblad lived on behind bars. He learned to steep raisin-jack in a can under his cot and, more important, to enjoy drinking it. He learned to roll cigarettes made of toilet paper and tobacco from butts stomped out by the guards. And he learned to think.

He spent eighteen years brooding on his wrongs, real or imaginary, eighteen years studying the social problems from which they sprang, eighteen years reading the recognized classics in the field of relations between the sexes—Nietzsche, Hitler, the Marquis de Sade, Mohammed, James Thurber. It is to this period of close reasoning and intense theorizing that we must look if we are to understand the transformation of a shy and inarticulate nonentity into the most eloquent rabble-rouser, the most astute political leader of his age.

A new Henry Dorselblad was released upon the world by the

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Masculinist mob. He led them, drunken rescuers and cheering prisoners alike, out of the smoking wreckage of the jail, beating time with the warden's hat as he taught them the riotous verses of a song he had composed on the spot, *"The Double Standard Forever—Hurrah, Boys, Hurrah!"*

One by one, the movers and shakers of his time learned to reckon with him. Rearrested in another state and awaiting extradition, Dorselblad refused to grant the governor an interview because she was a woman. A free-born male citizen, he maintained, could not accord legal or political dominance to a mere female.

The governor smiled at the paunchy little man who shut his eyes and jumped up and down, chanting, "Kitchens and skirts! Vapors and veils! Harems and whorehouses!" But she did not smile a week later when his followers tore down this prison too and carried him out on their shoulders, nor the next year when she was defeated for re-election—both disasters to the accompaniment of the self-same chant.

Nor did Shepherd L. Mibs smile much after Henry Dorselblad's guest appearance on "The Bull Session." Once it became apparent that he was political dynamite, that no state and no governor would dare move against him, he had to be tapped for the Masculinist program. And almost every viewer in the United States and Canada saw Shepherd Mibs, the moderator of the program and the National President of Masculinism, forced into a secondary, stammering position, completely eclipsed by Hellfire Henry.

Throughout the country, next day, people quoted Henry Dorselblad's indictment of modern society: "Women needed the law's special protection when they were legally inferiors of men. Now they have equality *and* special protection. They can't have both!"

Columnists and editorial writers discussed his pithy dictum: "Behind every successful woman there stands an unsuccessful man!"

Everyone argued the bio-psychological laws he had propounded: "A man who enjoys no power during the day cannot be powerful at night. An impotent man in politics is an impotent man in bed. If women want lusty husbands, they must first turn to them as heroic leaders."

Actually, Dorselblad was simply rephrasing passages from Mibs' editorials which he had read and reread in his prison cell. But he rephrased them with the conviction of a Savonarola, the fire and fanaticism of a true prophet. And, from the beginning, it was observed, he had almost the same impact on women as on men.

Women flocked to hear him speak, to listen to his condemna-

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tions of their sex. They swooned as he mocked their faults, they wept as he cursed their impudence, they screamed *yeas* as he demanded that they give up their rights and return to their correct position as "Ladies—not Lords—of Creation."

Women flocked; men massed. Dorselblad's personality tripled the membership of the Movement. His word, his whims, were law.

He added an item to Masculinist costume, a long, curling eagle's feather stuck in the brim of the derby. All over the world, eagles were hunted down relentlessly and plucked bare for the new American market. He added a belligerent third principle to those enunciated by Mibs and Pollyglow, "No legal disabilities without corresponding legal advantages." Men refused to be breadwinners or soldiers unless they were recognized as the absolute monarchs of the home. Wife-beating cases and paternity suits clogged the courts as the Masculinist Society pledged its resources to any man fighting the great fight for what came to be called the Privilege of the Penis.

Dorselblad conquered everywhere. When he assumed a special office as the Leader of Masculinism—far above all Founders and Presidents—Mibs argued and fought, but finally conceded. When he designed a special codpiece for himself alone—the Polka-Dotted Codpiece of the Leading Man—Mibs scowed for a while, then nodded weakly. When he put his finger on Masculinism's most important target—the repeal of the Nineteenth Amendment—Mibs immediately wrote editorials damning that irresponsible piece of legislation and demanding the return of elections held in saloons and decisions made in smoke-filled cubicles.

At the first National Convention of Masculinism in Madison, Wisconsin, Old Shep shared a docile anonymity with old Pep, in a corner of the platform. He yelled and stamped with the rest when Hank the Tank thundered: "This is a *man's* civilization. *Men* built it, and—if they don't get their rights back—*men* can tear it down!" He chuckled with the others at the well-worn barbs that Dorselblad threw: "I didn't raise my boy to be a housewife" and "Give me the name of one woman, just one woman, who ever —" He was in the forefront of the mob that marched three times around the hall behind Hellfire Henry, roaring out the Song of Repeal:

"Cram! Cram! Cram! the ballot boxes—
Jam! Jam! Jam! the voting booths. . . ."

It was a stirring spectacle: two thousand delegates from every state in the union, their derbies bouncing rhythmically on their heads, their eagle feathers waving

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in majestic unison, swords jangling, codpieces dangling, and great, greasy clouds of cigar smoke rolling upwards to announce the advent of the male millennium. Bearded, mustachioed men cheered themselves hoarse and pounded each other's backs; they stamped so enthusiastically on the floor that not until the voting began was it discovered that the Iowa delegation had smashed themselves completely through and down into the basement below.

But nothing could destroy the good humor of that crowd. The more seriously injured were packed off to hospitals, those with only broken legs or smashed collar bones were joshed uproariously and hauled back to the convention floor for the balloting. A series of resolutions were read off, the delegates bellowing their agreement and unanimity.

Resolved: that the Nineteenth Amendment to the Constitution of the United States, granting universal female suffrage, is unnatural biologically, politically and morally, and the chief cause of our national troubles. . . .

Resolved: that all proper pressure be brought to bear on the legislators of this nation, both holding and seeking office . . .

Resolved: that this convention go on record as demanding . . .

Resolved: that we hereby . . .

There were mid-term congressional elections that year.

A Masculinist plan of battle was drawn up for every state. Coordinating committees were formed to work closely with youth, minority and religious groups. Each member was assigned a specific job: volunteers from Madison Avenue spent their evenings grinding out propagandistic news releases; Pennsylvanian coal miners and Nebraskan wheat farmers devoted their Saturdays to haranguing the inmates of old age homes.

Henry Dorselblad drove them all relentlessly, demanding more effort from everyone, making deals with both Republicans and Democrats, reform elements and big city bosses, veterans organizations and pacifist groups. "Let's win the first time out—before the opposition wakes up!" he screamed to his followers.

Scrabbling like mad at their beloved fence, the politicians tried to avoid taking a definite position on either side. Women were more numerus and more faithful voters than men, they pointed out: if it came to a clear contest, women had to win. Masculinist pressure on the ballot box was considerable, but it wasn't the only pressure.

Then the voice of Hank the Tank was heard in the land, asking women—in the name of their own happiness—to see to it that the long, long winter of feminism was definitely past. Many women in his audiences fainted dead away from the sheer flattery of having

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Henry Dorselblad ask them for a favor. A ladies' auxiliary to the Masculinist Movement was organized—The Companions of the Codpiece. It grew rapidly. Female candidates for office were so ferociously heckled by members of their own sex that they demanded special police protection before addressing a street-corner rally. "You should be ironing your husband's shirts!" the lady masculinists shouted. "Go home! Your supper's burning!"

One week before election, Dorselblad unleashed the Direct Action squads. Groups of men, wearing codpieces and derbies, descended upon public buildings all over the country and chained themselves to lampposts outside. While officers of the law chopped away at their self-imposed bonds with hacksaws and acetylene torches, the Masculinists loudly intoned a new liturgy: "Women! Give us your vote—and we will give you back your men! We need your vote to win—you need to have us win! Women! Give us your vote on Election Day!"

Where, their opponents inquired cruelly, was the vaunted pride and arrogance of Masculinism in such an appeal? Were the Lords of Creation actually begging the weaker sex for a boon? Oh, for shame!

But Dorselblad's followers ignored these jeers. Women must themselves return the vote they had falsely acquired. Then they would be happy, their men would be happy, and the world would be right again. If they didn't do this of their own free will, well, men were the stronger sex. There were alternatives. . . .

On this ominous note, the election was held.

Fully one-fourth of the new Congress was elected on a Masculinist platform. Another, larger group of fellow travelers and occasional sympathizers still wondered which way the wind was really blowing.

But the Masculinists had also acquired control of three-quarters of the state legislatures. They thus had the power to ratify a constitional amendment that would destroy female suffrage in America —once the repeal bill passed Congress and was submitted to the states.

The eyes of the nation swung to its capitol. Every leader of any significance in the movement hurried there to augment the Masculinist lobby. Their opponents came in great numbers too, armed with typewriter and mimeograph against the gynocratic Ragnarok.

A strange hodge-podge of groups, these anti-Masculinists. Alumna associations from women's colleges fought for precedence at formal functions with Daughters of 1776; editors of liberal weeklies snubbed conservatively inclined leaders of labor unions

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who in-turn jostled ascetic young men in clerical collars. Heavy-set, glaring-eyed lady writers spat upon slim and stylish lady millionairesses who had hurried back from Europe for the crisis. Respectable matrons from Richmond, Virginia, bridled at the scientific jocosities of birth controllers from San Francisco. They argued bitterly with each other, followed entirely divergent plans of action and generally delighted their codpieced, derbied, cigar-smoking adversaries. But their very variety and heterogeneity gave many a legislator pause: they looked too much like a cross-section of the population.

The bill to submit repeal of the Nineteenth Amendment to the states wandered through an interminable Congressional labyrinth of maneuver and rewording and committee action. Mobs and counter-mobs demonstrated everywhere. Newspapers committed themselves firmly to one side or the other, depending on their ownership and, occasionally, their readership. Almost alone in the country, the New York *Times* kept its head, observing that the problem was very difficult and asking that the decision—whatever it eventually was—be the right one—whatever that might be.

Passing the Senate by a tiny margin, the bill was sent to the House of Representatives. That day, Masculinist and anti-Masculinist alike begged and battled for a gallery pass. Hellfire Henry and his followers were admitted only after they had checked their swords. Their opponents were forcibly deprived of a huge sign smuggled to the gallery in four sections. "Congressman!" the sign shouted. "Your grandmother was a suffragette!"

Over the protests of many legislators seeking anonymity on this issue, a roll-call vote was decided upon. Down the list of states it went, eliciting so many groans and cheers from the onlookers that the Speaker finally had to lay aside his damaged gavel. Neck and neck the two sides went, the Masculinists always holding a slim lead, but never one large enough. Finally the feverish talliers in the gallery saw that a deadlock was inevitable. The bill lacked one vote of the two-thirds majority necessary.

It was then that Elvis P. Borax, a junior Representative from Florida who had asked to be passed originally, got to his feet and stated that he had decided how to cast his vote.

The tension was fantastic as everyone waited for Congressman Borax to cast the deciding vote. Women crammed handkerchiefs into their mouths; strong men whimpered softly. Even the guards stood away from their posts and stared at the man who was deciding the fate of the country.

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Three men rose in the balcony: Hellfire Henry, Old Shep and white-haired Old Pep. Standing side by side, they forebodingly held aloft right hands clenched around the hilts of invisible swords. The young Congressman studied their immobile forms with a white face.

"I vote nay," he breathed at last. "I vote against the bill."

Pandemonium. Swirling, yelling crowds everywhere. The House guards, even with their reinforcements from the Senate, had a hard, bruising time clearing the galleries. A dozen people were trampled, one of them an elderly chief of the Chippewa Indians who had come to Washington to settle a claim against the government and had taken a seat in the gallery only because it was raining outside.

Congressman Borax described his reactions in a televised interview. "I felt as if I were looking down into my open grave. I had to vote that way, though. Mother asked me to."

"Weren't you frightened?" the interviewer asked.

"I was very frightened," he admitted. "But I was also very brave."

A calculated political risk had paid off. From that day on, he led the counter-revolution.

III: THE COUNTER-REVOLUTION

The anti-Masculinists had acquired both a battle-cry and a commander-in-chief.

As the Masculinist tide rose, thirty-seven states liberalizing their divorce laws in the husband's favor, dozens of disparate opposition groups rallied to the standard that had been raised by the young Congressman from Florida. Here alone they could ignore charges of "creeping feminism." Here alone they could face down epithets like "codpiece-pricker" and "skirt-waver," as well as the ultimate, most painful thrust—"mother-lover."

Two years later, they were just strong enough to capture the Presidential nomination of one of the major parties. For the first time in decades, a man—Elvis P. Borax—was nominated for the office of chief executive.

After consulting the opinion polls and his party's leading strategists, not to mention his own instincts and inclinations, he decided to run on a platform of pure, undiluted Mother.

He had never married, he explained, because Mother needed him. She was eighty-three and a widow; what was more important than her happiness? Let the country at large live by the maxim which, like the Bible, had never failed: Mother Knew Best.

Star-studded photographs of the frail old lady appeared all over the land. When Dorselblad made a sneering reference to her, Borax replied with a song of his own composition that quickly soared to the top of the Hit Parade. That

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record is a marvelous political document, alive through and through with our most glorious traditions. In his earnest, delicately whining tenor, Borax sang:

"Rule, Maternall My mother rules my heart!

Mother never, never, never was a tart!"

And there was the eloquence of the famous "Cross of Swords" speech which Borax delivered again and again, at whistle stops, at church picnics, at county fairs, at state rallies.

"You shall not press down upon the loins of mankind this codpiece of elastic!" he would thunder. "You shall not crucify womankind upon a cross of swords!"

"And do you know why you shall not?" he would demand, his right hand throbbing above his head like a tambourine. The audience, open-mouthed, glistening-eyed, would sit perfectly still and wait eagerly. *"Do you know?"*

"Because," would come a soft, slow whisper at last over the public address system, "because it will make *Mother* unhappy."

It was indeed a bitter campaign, fought for keeps. The Dorselbladites were out to redefine the franchise for all time—Borax called for a law to label Masculinism as a criminal conspiracy. Mom's Home-Made Apple Pie clashed head on with the Sword, the Codpiece and the Cigar.

The other party, dominated by Masculinists, had selected a perfect counter-candidate. A former Under-Secretary of the Army and currently America's chief delegate to the thirteen-year-old Peace and Disarmament Conferece in Paris: the unforgettable Mrs. Strunt.

Clarissima Strunt's three sturdy sons accompanied her on every speaking engagement, baseball bats aslant on their shoulders. She also had a mysterious husband who was busy with "a man's work." In photographs which were occasionally fed to the newspapers, he stood straight and still, a shotgun cradled in his arm, while a good hound dog flushed game out of faraway bushes. His face was never clearly recognizable, but there was something in the way he held his head that emphatically suggested an attitude of no nonsense from anybody—especially women.

Hellfire Henry and Kitchen-Loving Clarissima worked beautifully together. After Dorselblad had pranced up and down a platform with a belligerently waving codpiece, after he had exhorted, demanded and anathematized, Clarissima Strunt would come forward. Replying to his gallant bow with a low curtsy, she would smooth out the red and white checked apron she always wore and talk gently of the pleasures of

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being a woman in a truly male world.

When she placed a mother's hand on the button at the top of her youngest son's baseball cap and fondly whispered, "Oh, no, I didn't raise my boy to be a sissy!"—when she threw her head back and proudly asserted, "I get more pleasure out of one day's washing and scrubbing than out of ten years' legislating and politicing!"—when she stretched plump arms out to the audience and begged, "Please give me your vote! I want to be the *last* woman President!"—when she put it that way, which red-blooded registered voter could find it in his heart to refuse?

Every day, more and more Masculinist codpieces could be counted on subways and sidewalks, as well as the bustle-and-apron uniforms of the ladies auxiliary.

Despite many misgivings, the country's intellectual leaders had taken up Borax' mom-spangled banner as the only alternative to what they regarded as sexual fascism. They were popularly known as the Suffragette Eggheads. About this time, they began to observe sorrowfully that the election was resolving an ancient American myth—and it looked like the myth made flesh would prevail.

For Borax campaigned as a Dutiful Son and waved his mother's photograph up and down the United States. But Clarissima Strunt was Motherhood Incarnate; and she was telling the voters to lay it on the line for Masculinism.

What kind of President would Strunt have made? How would this soft-voiced and strong-minded woman have dealt with Dorselblad once they were both in power? There were those who suggested that she was simply an astute politician riding the right horse; there were others who based a romance between the checked apron and the spotted codpiece upon Mrs. Strunt's undeniable physical resemblance to the notorious Nettie-Ann Dorselblad. Today, these are all idle speculations.

All we know for certain is that the Masculinists were three-to-two favorites in every bookmaking parlor and stockbroker's office. That a leading news magazine came out with a cover showing a huge codpiece and entitled *Man of the Year*. That Henry Dorselblad began receiving semi-official visits from U. N. officials and members of the diplomatic corps. That cigar, derby and sword sales boomed, and P. Edward Pollyglow bought a small European nation which, after evicting the inhabitants, he turned into an eighteen-hole golf course.

Congressman Borax, facing certain defeat, began to get hysterical. Gone was the crinkly smile, gone the glow from that sweet, smooth-shaven face. He began to make reckless charges. He charged cor-

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ruption. He charged malfeasance. he charged treason, murder, blackmail, piracy, simony, forgery, kidnaping, barratry, attempted rape, mental cruelty, indecent exposure and subornation of perjury.

And one night, during a televised debate, he went too far.

Shepherd Leonidas Mibs had endured displacement as Leader of the Movement far too long for a man of his temperament. His was the position at the rear of the platform, at the bottom of the front page, as an alternative speaker to Hellfire Henry. He burned with rebellion.

He tried to form a new secessionist group, Masculinists Anonymous. Members would be vowed to strict celibacy and have nothing to do with women beyond the indirect requirements of artificial insemination. Under the absolute rule of Mibs as Grand Master, they would concentrate on the nationwide secret sabotage of Mother's Day, the planting of time bombs in marriage license bureaus, and sudden, night-time raids on sexually non-segregated organizations such as the P. T. A.

This dream might have radically altered future Masculinist history. Unfortunately, one of Mibs' trusted lieutenants sold out to Dorselblad in return for the cigar-stand concession at all national conventions. Old Shep emerged white of lip from an interview with Hank the Tank. He passed the word, and Masculinists Anonymous was dissolved.

But he continued to mutter, to wait. And during the next-to-last television debate—when Congressman Borax rose in desperate rebuttal to Clarissima Strunt—Shepherd Mibs at last came into his own.

The video tape recording of the historic debate was destroyed in the mad Election Day riots two weeks later. It is therefore impossible at this late date to reconstruct precisely what Borax replied to Mrs. Strunt's accusation that he was the tool of "the Wall Street women and Park Avenue parlor feminists."

All accounts agree that he began by shouting, "And *your* friends, Clarissima Strunt, *your* friends are led by—"

But what did he say next?

Did he say, as Mibs claimed, "—an ex-bankrupt, an ex-convict and an ex-homosexual"?

Did he say, as several newspapers reported, "—an ex-bankrupt, an ex-convict and an ex-heterosexual"?

Or did he say, as Borax himself insisted to his dying day, nothing more than "—an ex-bankrupt, an ex-convict and an ex homo bestial"?

Whatever the precise wording, the first part of the charge indubitably referred to P. Edward Pollyglow and the second to Henry

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Dorselblad. That left the third epithet—and Shepherd L. Mibs.

Newspapers from coast to coast carried the headline:

MIBS CLAIMS MORTAL INSULT
CHALLENCES BORAX TO DUEL

For a while, that is for three or four editions, there was a sort of stunned silence. America held its breath. Then:

DORSELBLAD DISPLEASED URGES MIBS CALL IT OFF

And:

OLD PEP PLEADING WITH OLD SHEP—
"DON'T DIRTY YOUR HANDS WITH HIM"

But:

MIBS IMMOVABLE DEMANDS A DEATH

As well as:

CLARISSIMA STRUNT SAYS:
"THIS IS A MAN'S AFFAIR"

Meanwhile, from the other side, there was an uncertain, tentative approach to the problem:

BORAX BARS DUEL—
PROMISE TO MOTHER

This did not sit well with the new, duel-going public. There was another approach:

CANDIDATE FOR CHIEF EXECUTIVE CAN'T BREAK LAW, CLERGYMEN CRY

Since this too had little effect on the situation:

CONGRESSMAN OFFERS TO APOLOGIZE:
"DIDN'T SAY IT BUT WILL RETRACT"

Unfortunately:

SHEP CRIES
"FOR SHAME!
BORAX MUST BATTLE ME—
OR BEAR COWARD'S BRAND"

The candidate and his advisors, realizing there was no way out:

MIBS-BORAX DUEL SET FOR MONDAY
HEAVYWEIGHT CHAMP TO OFFICIATE

Pray for Me, Borax Begs Mom:
Your Dear Boy, Alive or Dead

Nobel Prize Winner Gets Nod
As Bout's Attending Sawbones

Borax and ten or twelve cigar-munching counselors locked themselves in a hotel room and considered the matter from all possible angles. By this time, of course, he and his staff only smoked cigars under conditions of the greatest privacy. In public, they ate mints.

They had been given the choice of weapons, and a hard choice it was. The Chicago Duel was dismissed as being essentially undignified and tending to blur the Presidential image. Borax' assistant campaign manager, a bril-

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liant Jewish Negro from the Spanish-speaking section of Los Angeles, suggested a format derived from the candidate's fame as a forward-passing quarterback in college. He wanted foxholes dug some twenty-five yards apart and hand grenades lobbed back and forth until one or the other of the disputants had been satisfactorily exploded.

But everyone in that hotel room was aware that he sat under the august gaze of History, and History demanded the traditional alternatives—swords or pistols. They had to face the fact that Borax was skillful with neither, while his opponent had won tournaments with both. Pistols were finally chosen as adding the factors of great distance and uncertain atmospheric conditions to their side.

Pistols, then. And only one shot apiece for the maximum chance of survival. But the site?

Mibs had urged Weehawken Heights in New Jersey because of its historical associations. Grandstands, he pointed out, could easily be erected along the Palisades and substantial prices charged for admission. After advertising and promotion costs had been met, the purse could be used by both major parties to defray their campaign expenses.

Such considerations weighed heavily with Borax' advisors. But the negative side of the historical association weighed even more heavily: it was in Weehawken that the young Alexander Hamilton had been cut down in the very flower of his political promise. Some secluded spot, possibly hallowed by a victory of the raw and inexperienced army of George Washington, would put the omens definitely on their side. The party treasurer, a New England real estate agent in private life, was assigned to the problem.

That left the strategy.

All night long, they debated a variety of ruses, from bribing or intimidating the duel's presiding officials to having Borax fire a moment before the signal—the ethics of the act, it was pointed out, would be completely confused by subsequent charges and countercharges in the newspapers. They adjourned without having agreed on anything more hopeful than that Borax should train intensively under the pistol champion of the United States in the two days remaining and do his level best to achieve some degree of proficiency.

By the morning of the duel, the young candidate had become quite morose. He had been out on the pistol range continuously for almost forty-eight hours. He complained of a severe earache and announced bitterly that he had only the slightest improvement in his aim to show for it. All the way to the dueling grounds while his formally clad advisors wrangled and disputed, suggesting this method and that approach, he sat in si-

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lence, his head bowed unhappily upon his chest.

He must have been in a state of complete panic. Only so can we account for his decision to use a strategy which had not been first approved by his entire entourage —an unprecedented and most serious political irregularity.

Borax was no scholar, but he was moderately well-read in American history. He had even written a series of articles for a Florida newspaper under the generic title of *When the Eagle Screamed,* dealing with such great moments in the nation's past as Robert E. Lee's refusal to lead the Union armies, and the defeat of free silver and low tariffs by William McKinley. As the black limousine sped to the far-distant field of honor, he reviewed this compendium of wisdom and patriotic activity in search of an answer to his problem. He found it at last in the life-story of Andrew Jackson.

Years before his elevation to high national office, the seventh President of the United States had been in a position similar to that in which Elvis P. Borax now found himself. Having been maneuvered into just such a duel with just such an opponent and recognizing his own extreme nervousness, Jackson decided to let his enemy have the first shot. When, to everyone's surprise, the man missed and it was Jackson's turn to fire, he took his own sweet time about it. He leveled his pistol at his pale, perspiring antagonist, aiming carefully and exactly over the space of several dozen seconds. Then he fired and killed the man.

That was the ticket, Borax decided. Like Jackson, he'd let Mibs shoot first. Like Jackson, he would then slowly and inexorably—

Unfortunately for both history and Borax, the first shot was the only one fired. Mibs didn't miss, although he complained later—perfectionist that he was—that defective sights on the antique dueling pistol had caused him to come in a good five inches below target.

The bullet went through the right cheek of the Congressman's rigid, averted face and came out the left. It imbedded itself in a sugar maple some fifteen feet away, from which it was later extracted and presented to the Smithsonian Institute. The tree, which became known as the Dueling Sugar Maple, was a major attraction for years and the center of a vast picnic grounds and motel complex. In the first decade of the next century, however, it was uprooted to make way for a through highway that connected Schenectady, New York, with the new international airport at Bangor, Maine. Replanted with much ceremony in Washington, D.C., it succumbed in a few short months to heat prostration.

Borax was hurried to the field hospital nearby, set up for just

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such an emergency. As the doctors worked on him, his chief campaign manager, a politician far-famed for calmness and acumen under stress, came out of the tent and ordered an armed guard posted before it.

Since the bulletins released in the next few days about Borax' condition were reassuring but cryptic, people did not know what to think. Only one thing was definite: he would live.

Many rumors circulated. They were subjected to careful analysis by outstanding Washington, Hollywood and Broadway columnists. Had Mibs really used a dum-dum bullet? Had it been tipped with a rare South American poison? Had the candidate's mother actually traveled all the way to New York from her gracious home in Florida's Okeechobee Swamp and hurled herself upon Old Shep in the editorial offices of the *Hairy Chest,* fingernails scratching and gouging, dental plates biting and tearing? Had there been a secret midnight ceremony in which ten regional leaders of Masculinism had formed a hollow square around Shepheerd L. Mibs and watched Henry Dorselblad break Mibs' sword and cigar across his knee, stamp Mibs' derby flat, and solemnly tear Mibs' codpiece from his loins?

Everyone knew that the young congressman's body had been so painstakingly measured and photographed before the duel that prosthesis for the three or four molars destroyed by the bullet was a relatively simple matter. But was prosthesis possible for a tongue? And could plastic surgery ever restore those round, sunny cheeks or that heartwarming adolescent grin?

According to a now firm tradition, the last television debate of the campaign had to be held the night before Election Day. Mrs. Strunt gallantly offered to call it off. The Boxax headquarters rejected her offer: tradition must not be set aside; the show must go on.

That night, every single television set in the United States was in operation, including even the old black-and-white collectors items. Children were called from their beds, nurses from their hospital rounds, military sentries from their outlying posts.

Clarissima Strunt spoke first. She summarized the issues of the campaign in a friendly, ingratiating manner and put the case for Masculinism before the electorate in her best homespun style.

Then the cameras swung to Congressman Borax. He did not say a word, staring at the audience sadly out of eloquent, misty eyes. He pointed at the half-inch circular hole in his right cheek. Slowly, he turned the other cheek. There was a similar hole there. He shook his head and picked up a large photograph of his mother in a rich sil-

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ver frame. One tremendous tear rolled down and splashed upon the picture.

That was all.

One did not have to be a professional pollster or politician to predict the result. Mrs. Strunt conceded by noon of Election Day. In every state, Masculinism and its protagonists were swept from office overwhelmingly defeated. Streets were littered with discarded derbies and abandoned bustles. It was suicide to be seen smoking a cigar.

Like Aaron Burr before him, Shepherd L. Mibs fled to England. He published his memoirs, married an earl's daughter and had five children by her. His oldest son, a biologist, became moderately famous as the discoverer of a cure for athlete's foot in frogs— a disease that once threatened to wipe out the entire French frozen-frogs-legs industry.

Pollyglow carefully stayed out of the public eye until the day of his death. He was buried, as his will requested, in a giant codpiece. His funeral was the occasion for long, illustrated newspaper articles reviewing the rise and fall of the movement he had founded.

And Henry Dorselblad disappeared before a veritable avalanche of infuriated women which screamed down upon Masculinist headquarters. His body was not found in the debris, thus giving rise to many legends. Some said that he was impaled on the points of countless umbrellas wielded by outraged American motherhood. Some said that he escaped in the disguise of a scrubwoman and would return one day to lead resurgent hordes of derby and cigar. To this date, however, he has not.

Elvis P. Borax, as everyone knows, served two terms as the most silent President since Calvin Coolidge and retired to go into the wholesale flower business in Miami.

It was almost as if Masculinism had never been. If we discount the beery groups of men who, at the end of a party, nostalgically sing the old songs and call out the old heroic rallying cries to each other, we have today very few mementoes of the great convulsion.

One of them is the codpiece.

The codpiece has survived as a part of modern male costume. In motion, it has a rhythmic wave that reminds many women of a sternly shaken forefinger, warning them that men, at the last, can only be pushed so far and no farther. For men, the codpiece is still a flag, now a flag of truce perhaps, but it flutters in a war that goes on and on.

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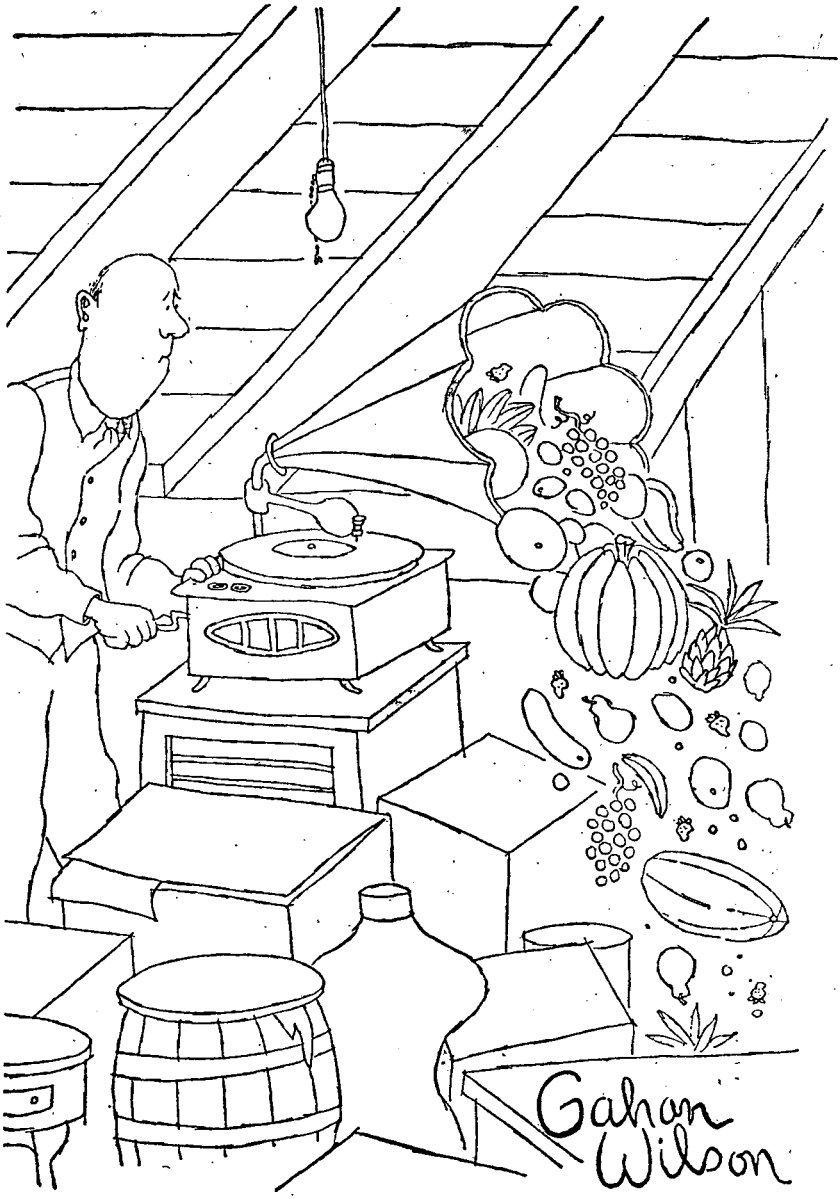

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Robert Rohrer's latest story concerns a deadly remnant from a century-old war—and its violent impact upon the crew of the Southern Star. *Inversely, though its setting is far from Earth in the distant future, its force will be readily felt in terms of the here and now.*

EXPLOSION

by Robert Rohrer

THE BLACK-HULLED MISSILE ticked invisibly against the night of space. It jumped rapidly from one predetermined coordinate to another in an ever-widening square. The missile had missed its intended target, so its graduated square had become unusually large. The side it leaped along now was 100,000 miles long.

The missile had been fired a hundred years before in a war that had changed a way of life, a war that had not ended with the surrender which the beaten side had been forced to make. The war was still being fought—not with the titanic forces of the Atom and the Machine, but with the minds and souls of men and of others who would be men.

The tiny atomic engine of the missile had kept the weapon leaping from point to point at a constant time rate for a century. It would keep the missile and the potent warhead moving until something got in the way.

Again a circuit closed, a rod moved, and the Atom spewed power. The missile did not think. It jumped.

A few hundred miles from the missile lay the small cruiser *Southern Star* in a green pool of undispersed liquid refrigerant that had accumulated outside her hull. There was a hole in the hull that a tiny meteor had punched out. Since the heat of the rockets would melt the hull if the refrigeration system did not function properly, the rockets had been shut off and the *Southern Star* lay without moving, with her protective screen down, in the direct path of the missile.

There were two men and two *Maxyd* in the cone-shaped entrance room just outside the rocket vault of the *Southern Star*. One of

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the men was tall, half-shaven, and glistening with perspiration on his face and his neck. The other man was shorter and cooler. The two *Maxyd* were covered on their faces and paws with brush-like yellow fur; their heads were shaped like dime-store teddy-bears', and they looked almost exactly alike, at least to the two men. All four wore the pale blue uniform of their spaceforce.

"Dam' pipe," said the tall man. He was unhappy because he was impatient to get to the next colony, and this repair job would delay the ship for a day, or maybe for two days. "Dam' ole pipe, has to get busted." He set down the heavy tools he was carrying and stood up and stretched. "Gawd, when I get to Fifteen I'm gonna get me the biggest whore I can find and I'm—"

"Shut up," said the shorter man.

The tall man stopped stretching. "What you say?"

"I said, 'Shut up.' I'm sick and tired of you and your damned *mouth*."

"Oh, you are, well listen, what are you anyway, a—"

"*Hee,* let us begin," said one of the *Maxyd*. "It is that the time wastes."

The tall man turned on the *Maxyd* and leered, "*Hee, hee,* you —Oh, all right, let's get on it."

The shorter man put down the tools he had brought, and since the men had carried the tools the *Maxyd,* who were already in space suits, donned helmets and prepared to enter the emergency aperture in the pipe.

In the control room of the *Southern Star* stood Captain Henry Bittnel. Bittnel was looking out the huge forward viewport of the ship at the white and pink spattering of stars on the black dome of the void. Bittnel, too, was going to find a prostitute as soon as he got to Colony Fifteen, but he did not tell his friends. He did not tell the radio operator who sat to his left, or the pilot who lounged in a padded chair before him, or the *Maxyd* who stood at his right arm. He was not going to tell his wife on Earth, either.

The *Maxyd* at Captain Bittnel's right was named Kaaru. He was Captain Bittnel's second in command, and he transmitted all of the complaints of the enlisted *Maxyd* to Captain Bittnel. There were many complaints, and Bittnel often cursed in the privacy of his cabin the law which necessitated the mixture of men and *Maxyd* in the crew of any military ship.

Bittnel never tired of watching the stars. There were many different kinds of stars, and they all had individual characters, for anyone who cared to look carefully enough to dig them out. And then when he had had enough of watching any particular star, Bitt-

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nel could stand back and get the whole effect of the dust and the fire and the shattered silver, and he never tired of it.

"That it is beautiful," said Kaaru quietly.

Bittnel half-turned. He liked Kaaru. What people said about the *Maxyd* race was so much garbage. They were proud people, Bittnel had found that out; but they were people. He sometimes could not understand why there was so much trouble among the crew over them.

"Where have you an intention to go when we are landed at Colony Fifteen?" asked Kaaru in his low, nasal voice.

"To the softest bed I can find," said Bittnel truthfully. The question made him uncomfortable.

"I, too," said Kaaru. His stubby muzzle twitched. "The situation among the crew members has improved a great length since you spoke to your people."

Bittnel said, "I think it has. If the enlisted *Maxyd* would just realize what a great deal of respect I have for them, and I'm sure most of the men have for them—"

Baker, the radio operator, looked up and took off his headset. "It's the radar chief, sir."

Bittnel took the headset and put one of the phones to his ear and spoke into the conical mike. "Harris?"

"Captain, there's a bogey off our starboard side, coming fast."

"Meteor?"

"No sir, the analyzers show radioactivity, sir. I think it may be a missile, sir."

"A missile?" Bittnel saw the others tense from the corners of his eyes. "Are you sure?"

"Yes—yes sir, it couldn't be anything else, sir."

"When will it hit?"

"In a minute and a half, sir, if we don't throw up the screen."

Bittnel handed back the headset. The screen generators would burn through the hull without refrigeration. But four of the crew were down there now, making repairs on the main refrigeration pipe. "Get the entrance room on the intercom."

"Yes, sir." Baker threw a switch.

Bittnel picked up the intercom mike. "This is the captain," he said. "Seal the emergency aperture in the main pipe."

A surprised voice said over the intercom, "But sir, two Maxies are in there working now."

Kaaru stiffened. Bittnel looked at the *Maxyd*. Kaaru's eyes were impassive. Bittnel knew what was behind them. "How far inside are they?" he asked.

"About fifty yards," said the voice.

Bittnel said to Kaaru, "We've got less than a minute. I've got to do it."

Kaaru said nothing.

Bittnel said into the mike, Seal the aperture immediately."

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"Yes, sir," said the voice. There was a sliding sound.

Bittnel turned to the pilot. "Pump the refrigerant back in and throw up the protective screen."

"Yes, sir." The pilot's hands danced over the control board.

Bittnel said to Kaaru, "There wasn't time to get them out." He knew that the *Maxyd* were at that moment being engulfed by refrigerant and battered to death on the connective girders in the pipe. "I'm sorry." And he was.

Kaaru said slowly, "I understand this. But will my people understand?"

"You must *make* them understand," said Bittnel intensely. "Kaaru—"

An electric horn blared in the ship. That meant the missile had hit the protective screen, but that it had not exploded.

Kaaru said, "It did not explode. It is a dud, as you say." He said this in a matter-of-fact way, but there was more accusation in his words than an angry tone could have put there.

Bittnel said to the pilot, "Send some demolitions men out to get that thing inside if they think it's safe, Lieutenant. We can't leave it running around out there." He felt dried out inside. He had killed two people, perhaps for no reason. "I'm sorry, Kaaru. I had no—choice, I—"

"I will try to tell my people of it," said Kaaru. His eyes were distant, distant as they had never been before the the course of Bittnel's friendship with him. "I will tell them. It would be better if I could tell them of your apology for the deaths at the same time."

Bittnel looked at Kaaru sharply. The *Maxyd* were a proud people, but there were rules. "You know I can't do that, Kaaru," he said.

Kaaru looked at his open paws and shrugged. "As you say."

The tall man was talking to two of his friends in his compartment. He said, "I got to give it to two of those dam' Maxies today."

One of the friends said, "Naw!"

"Yeah, I did," said the tall man. "I was on that repair detail; Cap'n called down, said 'Close up that emergency dingus, right now,' so I did and right away *whoosh,* the pipe filled up up with that refrigerant. Heard those two Maxies bangin' by inside. Got to go in and take 'em out tomorrow. We won't get to Fifteen for another day, but it was worth it, I got to give it to two of those dam'—savages."

"Aw, you didn't give it to 'em, you just did what the Cap'n said."

"Yes, the Captain, he give it to them."

"Hell, it was just like givin' it to 'em myself," said the tall man. "I'd like to do it again. I'd like to *really* get me one, good."

"So would I," said one of the friends.

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Bittnel was reading the report of the demolitions squad just before sack time when Kaaru came into his cabin.

Bittnel stood. "Kaaru, will you sit?" he said, purposely following the translated speech-pattern of the *Maxyd* ritual courtesy.

"I would," Kaaru refused. He omitted the customary opening expletive, so Bittnel knew his mood was grave. "I have spoken with my people. They are from themselves for the departure of their comrades. They talk of—unwise things. They demand a personal apology."

Bittnel compressed his lips. He had half-expected this. The *Maxyd* wielded tremendous political influence in the interplanetary government because of their position, until very recently, as an underprivileged social group. They expected men to follow their wishes unquestioningly now that they had gained a certain measure of equality. A great deal of misunderstanding was resulting in the planets.

Bittnel did not want any misunderstanding on his ship. Misunderstanding was dangerous on a long-run voyage in a tiny vessel with no women to relieve the tensions. Bittnel asked, "Kaaru, do you remember the *Lincoln*? The lynchings?"

Kaaru stood quietly.

Bittnel said, "The *Lincoln's* master tried apology."

"It was the fault of the crewmen," said Kaaru.

Bittnel shook his head. "It was the captain's fault," he said. "The captain shouldn't have apologized. The *Maxyd* in the crew took the apology as a certificate of superiority over the men. They lorded that apology over the men until the men blew up, so the *Lincoln* wound up a dead ship. I don't want rioting in my ship, Kaaru, and if I did what you want I'd be running a bad risk of having just that, for exactly the same reason. I can't chance it."

Either Kaaru ignored the point or it did not sink in. "The case with the *Lincoln* was a different one in circumstance," said Kaaru.

"Yes, but the *elements* were the same, Kaaru," said Bittnel. "Don't you see, that's why there's a rule against a captain making any sort of concession to his crew. It would destroy his authority over them, and that would mean no morale, no order—"

"I understand that there is a regulation," said Kaaru. "But I cannot make my people realize that you are not using this regulation as an excuse because you do not wish to apologize to the—Maxies." He said the word bitterly.

Bittnel said, "Your people, my people—Kaaru, we are supposed to be *one* people, one crew on this ship, functioning as a unit. As long as we are working *against*

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each other like this, trying to be one up on each other all the time, there will be no unity. Now the simple fact is that if a captain abases himself before his crew, he loses their respect, and whatever control he has over them. That's why there's a regulation. I happen to be the captain of this ship, and the people you call your people happen to be part of my crew, and what I did had to be done—so I am going to follow the regulation."

Kaaru said quietly, "This is a tremendous insult to my people."

Bittnel scowled and then tried again. "Look," he said, holding out the sheet of paper he had been reading, "This is the report the demolitions men sent to me. Look at it. If the missile had hit the hull, it would've gone off. It's an old missile, the screen wasn't quite solid enough to trigger the warhead, but the hull would've been. Now the thing's holding on by a thread. The smallest, the smallest jar could make it cut loose. It's in the armory now, on braces. Before we get to Fifteen we'll have to eject it in a Safe Zone and detonate it. It would have blown this ship in half, Kaaru. Those two didn't die for nothing. Tell the others that."

Kaaru finished reading and looked to Bittnel. Bittnel could almost see Kaaru's mind turning behind those large, pale eyes. Finally Kaaru made a decision. He said, "I will try. I will tell them in the morning."

Bittnel smiled and said, "Good."

At lunch period the next day, the tall man talked to several of his friends across the narrow, long mess table reserved for the men. The *Maxyd* always ate at another table, across the mess hall.

The tall man was bitter. "Look at those bastards over there," he said, pointing. "Look at those hairy bastards. Probably figuring out how to get our scalps. I'm glad those two got it, you know? Them and their dam' *hee-hee's,* and their dam' pop-eyes. They don't deserve to sleep in bunks like us, you know that? They're just savages with uniforms on, that's all they are. Just a few years ago they were still livin' in caves, and that's the truth. Savages, that's what they are."

The rest of the men, wide-eyed, leaned around the tall one. Every now and then one said, "Yer right, you know?"

At that moment, Kaaru was facing Bittnel across Bittnel's desk. Kaaru put the demolitions report carefully on the desk. "They must have an apology," he said.

Bittnel said, "No. I can't."

"And you mean that you *will* not," said Kaaru. "You do not think them worthy of an apology from a man. That is what they think."

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"And that's what you think, too, isn't it, Kaaru? That is what you think."

Kaaru looked to one side and said, "It is a matter of honor."

"Of your honor, isn't it? As their leader?" Bittnel put his forehead against his folded hands tiredly. "Pressures, pressures," he said. "On me, on you—on all of us."

"My people have suffered before great indignities at the hands of your crewmen," said Kaaru.

"They won't ever again. I've promised that."

"It is not enough. They must have proof of your good will."

For the first time, Bittnel allowed his irritation to show. "No, damn it! I won't break regulations, and that's all there is to it. I am sorry about what happened, you know that, but an open apology is impossible. I'm sorry."

Once again Kaaru's eyes showed that he had made a decision. He said, "Under the pressure of duty to the honor of my people, I must say this, that I have in my possession certain documented record of your activities on the last two colonies we have stopped in, Captain, which it would be disastrous for the central authorities—or for your wife—to see. You have talked of not breaking the regulations, Captain, and yet you have done it, in a far less seemly fashion. You know of what I speak."

Bittnel was thunderstruck. "You —had me—followed!" he said.

"Since at the time the situation on board was very dire," said Kaaru in a sing-song tone, "and I was under the thought that such information might be of much use to the interests of my people. If you choose to ignore their request for satisfaction now, I will be forced to send this information to the central authorities and to your wife, and I have hesitated, but now I see my duty."

"You would do that!"

"There is the morale of my people to think of," said Kaaru.

"You would do that! Why, you God-damned, stinking—get out. Get out of this office."

"You would wish that your wife know of your moral turpitude? Very well—"

Bittnel charged around his desk and took Kaaru by the collar and opened the door and pushed Kaaru into the passageway. Kaaru let himself be forced from the office; he tripped clumsily into the opposite wall. Bittnel closed the door.

How? How would he explain to her? What explanation was there, except that he was a weak man and the way things built up inside him on a long trip when he was alone, and that they meant nothing to him, only she meant anything to him—

That was the part she would hate him for most, that the others

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meant nothing. She would think of the others, not of herself. There was no way to explain it to her, especially from the middle of the universe.

He sat at his desk. He had liked Kaaru. He had heard of the "blood flaw" of the *Maxyd,* of their cunning, their underhanded viciousness, but he had never believed it of Kaaru until now. Kaaru.

Well, what of it? his mind said. Kaaru is only trying to protect the interests of his people, in the way he has been taught to. He knew about you all the time, and he never treated you as less than an equal for it.

But why, *why* did he use it now, against his friend, his captain? Bittnel's mind fell just short of the truth and went pitifully through the same frustrated cycle again and again until it was red and hot with the blood that anger forced into his temples.

At least he didn't have to let Kaaru send whatever material he had from the ship. He phoned the radio operator and put a ban on all transmissions not in direct reply to an outside call.

"Now I'm right about what I say," said the tall man. "You see that skinny one with the bars? He's the Cap'n's First Mate, whatever dam' good he is I don't know. Look at him. Look, see how he's talkin' to 'em? He's gettin' 'm ready for somethin', I know, I've seen 'em work before ("You have?" "What they gonna do?"), I've seen 'em. They always got this head man who comes and tells 'em what the next move's gonna be, before they eat or sleep—or b'fore they jump on somebody."

"What!" "What you mean, jump on somebody?"

"Just what I said. They get together like that every time b'fore they close in for killin' somebody. They can hug you to death, they don't look like it, but they can."

"Gawd!" "My blaster's in my bunk!" "Look at that, *they* all got guns!" "You better get yours." "Shh! *Don't* let 'em hear us."

"Shut up, you bumpkins," said the tall man. "Wilks you better get that gun. Look at 'em there."

The *Maxyd* were growling at something Kaaru was saying. Teeth showed. The man called Wilks scuttled away.

Abruptly, one of the *Maxyd* rose and left the mess hall. The tall man said, "Look at that! There goes one of 'em!" He bowed his head and lowered his voice. "I'm gonna go around the other way and catch up to him and see what he does. You hear anything funny, you start shootin', hear?"

"Sure." "Yeah." "Watch it, man." "We'll get 'em."

The tall man left.

Bittnel did not hear the fighting until his phone buzzed and he heard shouting through the receiver behind the chief pilot's

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voice. "Captain Bittnel?" said the pilot.

"What is it?"

"Captain, there's some shooting going on down here. A Maxie tried to get Baker to send a duplication to Earth, and he raised a row when we told him we couldn't do it, and—" The pilot was breathing hard.

"Yes?" said Bittnel.

"Someone on the —companionway—shot the Maxie in the back with a blaster. Right away a lot of shooting started, sounded like it was in the mess hall—and—"

"What's the matter, Russell?"

"The—I—"

Bittnel jerked his receiver from his ear as the pilot's receiver smashed against something. "Russell? Russell!"

He could hear shooting in the hall outside his office now. He rose and pulled his blaster from its holster. He went to the door and opened it. A man with no chest was lying just outside. A *Maxyd* was crouching beside the body. The *Maxyd* raised a gun at Bittnel's face.

Bittnel had no time to shout a warning. Instinctively he fired his weapon. The *Maxyd's* head exploded.

Bittnel moved into the hall. There was a lot of fighting going on below decks; the noise was terrific.

Bittnel made it to the control room. The pilot was sprawled across the floor. He had been shot in a bad place. Bittnel was surprised he could have talked.

Bittnel switched on the general intercom and said, "Attention! Attention all hands! This is Captain Bittnel! All fighting must cease immediately, I repeat, *immediately!* All weapons must be laid aside. All those who continue to fight or to carry weapons after this moment will be thrown into the brig and brought before—" Bittnel stopped. He had noticed the broken glass on the floor. He pulled the top of the intercom open. The circuits had been torn out and the tubes had been smashed.

Bittnel left the control room. Halfway down the companionway to the lower deck, he remembered the missile in the armory. What if someone got to the armory?

He wheeled and jumped back up the steps and ran through the hall of the main deck. If anyone shot that missile, or even knocked it over, the ship would be blown apart. Also, there was extra ammunition in the armory. He would have to seal the entrance.

The tall man was running from compartment to compartment on the lower deck and shooting any alternate-shift *Maxyd* who were asleep inside. The tall man enjoyed the way the blaster jerked in his hand and the *Maxyd* jerked on their bunks right after. Sometimes he deliberately aimed a bad shot

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so a *Maxyd* screamed and writhed to the floor, and the tall man would wait until the wounded *Maxyd* saw him and started crawling away from him and then he would shoot again.

Bittnel slammed the door of the armory open, jumped inside, closed the door and locked it, and—

"So, Captain!"

Bittnel whirled. Kaaru was crouching in the middle of the floor. Bittnel was going to have to kill Kaaru.

Suddenly the whole mass of emotion that had been accumulating in Bittnel's chest since the deaths in the refrigeration pipe welled up and burst through his throat, and Bittnel shouted "Oh *damn!*" It was a hopeless supplication, the cry of a lost man. It was a cry against the blood-blinded hatred that made intelligent people want to kill each other; it was a protest against the loneliness that made weak men look to loose women and weaker men look to worse things, and against the inept military system that made the men lonely for years and years in the tomb of space.

Kaaru did not hear the supplication in Bittnel's oath. Kaaru was responding to centuries of savage culture; he was a killer robot who leaped at the remote-control commands of his ancestors. He leaped now, into Bittnel.

Bittnel did not have a chance to pull his blaster from his holster before his arms were pinned to his sides and he staggered back under the force of Kaaru's impetus and crashed into a wall of the armory.

Kaaru's grasp tightened and tightened around Bittnel's chest, and Bittnel's breath came in short, staccato gasps. Then Kaaru shifted his hold slightly to increase the pressure, and Bittnel's hand moved directly onto the butt of his pistol.

Bittnel's hat had fallen to the floor. Kaaru was already pushing Bittnel into a final, spine-snapping backward bend. Bittnel could not get his gun from his holster, but he could move it slightly against his leg. He tried to move the barrel against Kaaru's body, but he could not, so he pulled the trigger without aiming.

The blind shot cut through two of the four diagonal steel beams that supported the black missile horizontally close by. Neither Bittnel nor Kaaru saw the missile rock down on the remaining two beams and snap them and drop to the floor.

The tall man screamed as the terrible red heat of the blast ripped flesh from his face and body in great chunks. The armory was in the middle of the *Southern Star*, so the ship was blown in half. The two maimed sections cartwheeled away from each other into the darkness. ◄

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CRYSTAL SURFACES

by Theodore L. Thomas

THERE ONCE WAS A TIME when nobody worried much about the surfaces of metals and compounds; after all, the surface must be the same as the interior. But as time went on it became apparent that there was something peculiar about surfaces. Unexpected chemical reactions took place when a surface was near by. So it became necessary to take a close look at surfaces to see what was going on.

X rays were no good for the purpose; they penetrated too deeply. Neutrons penetrated even deeper. Ordinary light was useless; the wavelengths were too long and flopped right around the atoms on the surface. Finally somebody thought of using a beam of slow-moving electrons. The wave nature of slow electrons was such that they reflected and diffracted very nicely. When the diffracted electrons were directed to a fluorescent screen, you could sit back and look at the atomic structure of a surface, magnified many millions of times.

But early results raised the specter of contamination. Inspection of the freshly cut surface of a titanium crystal showed that much of the surface was covered by a layer of oxygen atoms. Due to the oxygen, the titanium atoms on the surface had rearranged into a configuration different from that existing in the interior of the crystal. It was found that the surface could be cleaned under vacuum by heat and by bombardment with argon ions, a process known as sputtering. In this manner it became possible to view a normal surface, and to move atoms around on it.

So physicists can now spot the positions of individual atoms on a surface. This might be enormously useful in the storage and retrieval of information. Memory banks in some computers are made up of tiny cores, each being a speck of magnetizable material with a drilled hole. Each core contributes to information storage by simply being magnetized or demagnetized, on or off, yes or no. Well, why couldn't the position of an atom supply the same information? If an atom in the surface network is here, it means yes,

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if there, no. Slightly more penetrating radiation could be used to read out the layers which lie beneath the surface.

We used to think it wondrous to engrave the Lord's Prayer on the head of a pin. Now that we can read the positions of atoms, all the world's knowledge could be stored on the head of a pin. In fact, there would be so much room left over on that pin-head that we could send it on to other worlds when we find them so they could add their knowledge. Our pin-head would become a kind of Galactic Library.

COLLECTOR'S ITEMS

We have had a number of requests for two back issues of F&SF which are fast becoming collector's items. The first is the May 1963 special Bradbury issue. It contains two stories by Ray Bradbury, a complete index of his works, and a profile. Cover is by Joe Mugnaini. The second is the November 1963 issue, featuring "A Rose For Ecclesiastes" by Roger Zelazny and "The Eyes of Phorkos" by Sir Lawrence Jones. The beautiful and distinctive cover is by the late Hannes Bok—his last fantasy cover. Only a limited number of copies of either issue are available. There can be no reprints after the supply is exhausted. $1.00 each from Mercury Press, 347 E. 53 St., New York, N. Y. 10022.

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Willard Marsh (whose new novel, WEEK WITH NO FRIDAY, has just been published by Harper & Row) offers a poignant demonstration of the Oscar Wilde observation: "It is through Art and Art only that we can shield ourselves from the sordid perils of actual existence."

EVERYONE'S HOMETOWN IS GUERNICA

by Willard Marsh

THE SLENDER RAIN HAD LIFTED with the offshore breeze, The gutters, still quick with water, shone spent yellow in the freshening light of dawn. A roundshouldered little man in a once white messjacket came up the sidewalk. He watched the choppy waters of the bay against the gray horizon as the skyline ripened. Perched like a thirsty turtle, he craned his short corded neck to watch the changing tints of sunrise. He was an artist. His stubby fingers had the gift of snaring rhythm, shape and color, looming them late evenings in his basement room until his inner vision took place on the canvas, hot and distorted, more intimate than reality. He was an artist, but no one knew it.

To support himself he washed dishes in an all-nite cafeteria along the waterfront. But now he wasn't even a dishwasher. He'd been fired last night for dropping a bus pan full of glasses. Roaming the empty streets, his bitterness cooling in the rain, he had now turned homeward.

Hearing blurred laughter, he glanced up to see a couple hidden in the porch of a rooming house. Hands linked, they stared beyond him toward the seablown stars above the harbor. The artist ducked his head and hurried past them, conscious of his compulsive calling that separated him from normal sounds and sights.

When he rounded the corner, a streetcleaner's cart came rumbling toward him. As it bumped along the cobbles, a kitten darted from behind a trashcan. Impulsively the artist squatted on his heels. He

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could see green eyes measuring him from the shadows. Gently, he drew the kitten free. It was thin-ribbed and damp, the color of the pavements that had hatched it. He held it till the streetcleaner passed, reassuring it it wouldn't be collected. But when he set it back down in farewell, the kitten hooked its claws in his pants-leg and clung reproachfully.

The artist picked it up again in embarrassment. He could feel the quick thud of its heart through his jacket, a ridiculously confident rhythm of survival for something so small and hoodooed. Probably swarming with fleas. Still, if it could intimidate the mice he supposed he could settle for the fleas.

Back in his room, the artist dumped the kitten on the floor. It stretched, yawned, then began searching for food. Such an optimist. Its sniffing led it across the cracked linoleum to the streaked wall, then under the stove. It emerged with a caking of dust and a shaken confidence to send up an insistent feeble yowling. The artist remembered the can of milk in the windowsill. He filled a saucer and added some stale bread. Standing above the kitten, he smiled at the steady feathery purring which swallowing barely interrupted.

Such an animal, he told it. Such a sad excuse for a ketzel.

When the kitten had finished, the artist hoisted it aloft.

Are you a girl ketzel or a boy?

But its immature pink belly distended with milk, told him nothing.

Things you should have to identify you.

It must be a boy, he decided. That a female of any kind could happen to him, even a scrawny *tochus* of a ketzel, was unlikely. It would have to have a name.

George, he said, testing it on his tongue. It sounded reasonable. George Ketzel, that's you now. Hear?

Unaware that it had become a soul of sorts, the kitten curled up on a mound of laundry, where it awaited further opulence. And now the artist felt a cleansing sense of exhilaration: part light-headedness from hunger or fatigue, part mere committal to routine again, if only through the frail committal of George Ketzel.

Hastily clearing the table, he set out his cans and jars and brushes and placed a fresh canvas on the easel. He had lived alone for so long that another creature with him was like summer in his room. Gradually the old hypnosis took hold, the idiot rhythm of creation. Eye hefted perspectives, wrist moved on subterranean levels of its own. Occasionally he'd swim out of it to watch the dozing kitten, addressing it in Yiddish with a clumsy mixture of tenderness and obscenity. By the time full morning grew across the easel, he knew he had an underpainting worth completing.

Day lengthened; he napped

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some, drank too much tea and argued too loudly with the kitten. But toward evening, when he'd been working for almost twelve hours, he knew he had it. Some unreachable inner censor admitted it would do. It lay, blocked and quiet on the canvas, waiting for the colors which would wrench it into life. And even if the finished painting were to hang in some forgotten corner, its fierce light wasting like uranium, it was still necessary.

Too exhausted to fall asleep immediately, he lay listening to the dinner-hour noises, the familiar quarrels sifting from the upper floors. Presently, as sleep and dusk approached together, he was vaguely aware of the kitten huddling beside him, its fur soft and smelling as he thought a woman's armpits might. Then, as with men in all the rooming houses of the city, a lovely lady came and bent into his slumber.

Morning broke, gong-yellow, slanting brassily through the torn shade. The artist swung his feet to the floor and began groping for his socks. Then he came fully awake. It wasn't the same floor anymore. It was as scrubbed and immaculate as new, if it ever had been new. Even the woodwork had been eased of its layered grime. He slowly raised his head. A woman was standing over the gleaming stove, her back to him.

She was slight, with delicate ears and long tawny hair. As she hovered above the skillet, tantalizing smells rose in the room. The artist drew a deep breath and let it out with a sign. At the sound the woman turned.

Breakfast will be ready soon, she said.

Breakfast? he asked.

As soon as you get dressed.

His mind came automatically up through his bewilderment to ask something. But instead he nodded, obediently pulling on his socks. The woman watched him with a calm smile as she continued cooking. He hurriedly finished dressing. Then he sat down again on the edge of bed, not knowing quite what was expected of him. She glanced up in surprise.

Aren't you going to wash?

Wash? he said. Oh yes, of course. Wash.

He squeezed into the kitchenette and doused his face at the sink. Drying himself, he noticed a large fish skeleton on the scrubbed drainboard. The kitten seemed to have gotten out the window during the night. He thought of asking the woman if she'd noticed, but then forgot as he watched her set the table with a fluid grace. She was probably, he decided, just about the most beautiful woman he'd seen in his life. Close up, at least. He cleared his throat.

So what's that you're cooking?

Her voice had a throaty breathlessness, as if on the edge of laughter. Her eyes, when he tried to meet

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them, were greenly secluded. She heaped his plate high, seated herself and began feeding with a quick delicacy.

He would have liked to know more about her, but she had a curtained independence that made communication clumsy, and finally unnecessary. When breakfast was over she washed the dishes, scrubbed the table and left. Presently he heard water running in the bathtub down the hall. He set his paints out again at the easel, but it was hard to concentrate. He supposed the kitten, wherever it was, would be back eventually. After awhile the woman returned, curling on the bed to watch him.

After preparing a light lunch of spaghetti and fishballs, she disappeared once again. And again she came in with her hair damp and a sleek shine to her complexion. As the afternoon deepened, he fell into an easy work rhythm. Humming tunelessly he glanced up now and then to watch her stretch and yawn, pink-mouthed, from the shadows.

The days passed in a summerish monotone. He would awake to a mopped room, clean underwear and the sizzling skillet smells. He would paint for what might have been hours at a stretch: the clock had long since run down. And when he went abroad, the streets admitted him. He'd lost his apologetic slouch and now went buoyantly erect, even pausing at times to study his reflection in shop windows in shy approval. Returning from these walks, regardless of the hour, he'd find the woman waiting —smilingly silent, passive.

Then late one sultry afternoon the painting was completed. The artist examined it objectively, or tried to. As the easel shimmered before him, a nervous excitment gradually possessed him. He had brought into being a castoff kitten, not unlike the one he'd lost. He had placed it against a stark sidewalk where rooming houses festered rawly. But it was something more than just an abandoned kitten. Digging beyond the surface tags of loneliness and hunger and despair, he had, by some subtle emotional photography, managed to snatch the dark old shape of misery. The kitten's eyes, like those of Tiresias, had turned inward, grown blind, wise, and all-seeing with suffering. You suspected it was going to die before the night was out—and yet you suspected it was going to die in dignity. That death, the greatest indignity of all, could yet be met, was continuously worth saying. Everyone's home town is Guernica.

Staring at his work, the artist felt confidence rising sweetly in his veins. He ran out into the dusky streets. His excitement had grown too intense to fit the narrow room. But when he came in sight of the downtown art galleries, some of this assurance left him and he slowed to a walk.

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He edged inside a smaller gallery where several well-dressed people were patrolling the thickly-carpeted gloom, conversing in reverent whispers. The artist took in the exhibits with a quick trained glance. He saw the customary groupings of still lifes and pastorales—competent, conventional and thoroughly predictable. Neo-Grandma Moseses faced rehashed Mondrians for contrast, only none of it contrasted. Somewhat more at ease, he wandered over to the prize exhibit.

It was a large oil painting of a horse, a handsome black stallion. Nothing was omitted but imagination. Every hair of the mane was in place. It was all horse, enough to shame a taxidermist. Then the artist noticed the price tag, tucked discreetly in a corner.

He couldn't understand. It was a figure that exceeded the necessities of life—his modest life from birth until this moment, in any event. He kept examining the painting to discover the reason for its value. But the explanation lay in a dimension he was too disturbed to find. Looking up in confusion, the artist saw a tidily-accountered clerk, the horse's groom, eyeing him in distaste. He slipped outside and took the long walk home.

There, he reappraised his painting. It looked more powerful than ever. But that meant it must be too strong, too bitter. Slowly he set out his paints again. He peered at the canvas, uncertainly attempting to lighten the overcast quality, perhaps reduce the harshness just a little. His anxiety began communicating itself to the woman. She moved around the room with a sullen restlessness.

Along toward dawn he quit work. The woman wasn't around, but now and then she disappeared about this time on some errand of her own, probably to search for food. With a dragged-out feeling the artist threw himself across the bed to wait for her return. After a while he dropped into a doze, unrefreshing and uneasy.

He awoke abruptly, still dressed. Afternoon sunlight was seeping through the shade. It fell thinly on the littered table and the unswept floor. The sink was still heaped with last night's dishes. The woman was gone. He would have called her, but he didn't know her name.

Padding over to the easel, the artist faced last night's accomplishment. The painting was a parody of itself. All the original fury had been extinguished by a soggy application of diplomacy and erasure. There was nothing left but a tabby cat smiling at its good-willed canvas world. *Get well,* it seemed to say, *it's Christmas.*

The artist closed his eyes. Then, through his despair, he heard a faint hungry mewing. And now he knew the woman's name. But when he opened his eyes and called her, only the kitten came. ◄

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Jody Scott (GO FOR BAROQUE, June 1961) says that she has lived a "Theater of the Absurd Life" and after reading the story below, we have no reason to disbelieve her. There are some people who think that Little Orphan Annie is a comic strip. If you are under that particular misconception THE 2-D PROBLEM will soon set you straight—as it will give you a fresh and funny and far-out (if somewhat nihilistic) focus on "reality."

THE 2-D PROBLEM

by Jody Scott

HANDSOME YOUNG DR. RAKE Savage relaxed at the Moon PX, smoking imported pot, digging the view of endless white desert and glittering craters. On the bandstand, what looked like a split-leaf philodendron with a high I.Q. was belting tender love songs about pollinization.

Rake was all keyed up. His dancer friend Wanda came on next. Picture this gorgeous starlet from Polaris, ten times lovelier than any show-business type from Earth. Bosoms perfect in shape yet larger than bedpillows. The audience regresses into savagery when she does her famous routine balanced naked on ten Sirian gladiators with a laser beam in each hand, singing *Moon River*. ("A keen sense of sex and danger" —N.Y. Herald Tribune.) Waiting on pins and needles, Rake inhaled; he held it for thirty seconds amid waves of rolling pleasure.

The waiter broke the spell with a phone call.

"I'm out," Rake choked, annoyed.

"Sir, it's an emergency. You're wanted at once."

That was the bloody drag about being head of the Lunar Quarantine Psychology Department; every busboy and hat check girl is your super-ego. The Moon was the Ellis Island of the gay new century, and immigrants from other worlds were quarantined here before being granted (or denied) Earth citizenship. A very explosive scene. Anything could happen, and everybody knew it.

On the screen, Rake's assistant Morehouse looked frantic.

"Doc," said Morehouse.

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Rake sighed. "Take a tranquilizer; I'm watching Wanda."

Morehouse blotted his forehead with the sleeve of his white coat. "I just can't handle this Callistan."

"Don't be silly! He's only thirty inches tall."

"Doc, uncanny things are happening."

"What uncanny things?"

"It's like a nightmare; I'm losing my mind."

"I see. Of course that's an occupational hazard. I'll be there directly," said Rake, and broke the connection. Wanda, in spotlights and nothing else, was electrifying. She was backed by a group of teenage lizards called The Saurians who were doing *A Pretty Polarian Girl Is Like a Melody* in neo-rock-&-roll. The audience went absolutely mad; except for the Earth girls, who were crushed, shattered, weeping. For the past century they had realized that an ugly Polarian chick is twice as gorgeous as the most gorgeous Earth chick. Ego bruising? You know it! But luckily Earth girls had discovered that a spray-on tranquilizer works three times faster than ordinary tablets, which kept them ahead of the game.

But Wanda—wow—this little doll was too much.

After her number she bounced over to Rake's table, breathless.

"Was I good?"

"Good? You were a sensation."

Wanda batted her lashes, accepting a Durango Special and a light. "Oh, crazy, this imported stuff is right up my alley," she breathed.

"Well don't get carried away. We've got to leave. Morehouse can't handle my Callistan."

"Your Callistan? And who is that, sweetie?"

"Oh, just a little humanoid with sad eyes and soft green fur."

"Sounds darling."

"He *is* darling. Like an imported teddy bear."

"How nice. I always sleep with a teddy bear."

"Not with Gax, you don't! He's an adult male, our first specimen from Callisto; kind of like being the very first tiger in the very first zoo."

"An adult male teddy bear," Wanda sparkled.

"Yeah; what a historic moment! We're going to send an Earth specimen to Callisto in exchange."

"Hook me," Wanda murmured, referring to her transparent bikini. "Why not send Morehouse? Then he can never interrupt us again."

Rake hooked, enjoying his work. "Let's hope nothing serious is wrong. He said something about 'uncanny nightmares'—do you suppose he's snapped under the strain? Come on, let's hurry."

They took the elevator car to the quarantine section and walked down the long corridor. Wanda

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disliked this section; it was unsettling. The corridor was lined with glassed-off rooms which simulated life on various planets. It was a place of horrible frozen gases and chilling sound waves, and miniature burning deserts where sentient beasts murdered and ate their 'cattle'—ghastly! There were blobs of lemon jello with beating hearts, and monkeys two inches tall, and cobra-headed Denebians with that smell between wet goat and pulp mill, and some of them would bang on the glass and shriek when you walked past—

"Ugh! And these creeps are demanding Earth citizenship," Wanda shuddered.

"Hush! Remember, the last department head got canned for defamation."

Morehouse rushed out. "It's not my fault," he cried instantly.

Rake said, "What isn't your fault? Pull yourself together!"

"I gave Gax a pile of comic books to read," Morehouse said, almost weeping.

"Fine; that's a harmless diversion."

"No, no! These people take things literally. He believes in the comic books."

"So what? I spent my whole childhood believing in comic books and look how successful *I* am."

"Doc, you don't understand," Morehouse yelled. "Remember when you studied the briefing manuals? 'Callistans absorb the culture and re-exude it.' You read that to me! You figured it was just a pedantic way of saying they adapt readily, remember?"

"Quit saying you-you-you and get to the point," Rake snapped.

"Brace yourself, Doc. This is his room."

Morehouse flung the door open. Inside was a bed, fireplace, bowl of goldfish, hooked rug, picture window and the little Callistan himself in a rocking chair. He was Late Walt Disney, almost to the point of obscenity, and Wanda fell in love.

"Morehouse tells me we got problems," said Dr. Savage with phony heartiness. He glanced around and saw nothing out of place and felt greatly relieved.

Gax stared at Wanda. "My God! May I touch those exquisite mammary glands? I've never seen an X-cup before."

"Certainly, if I may touch those velvety little feelers," Wanda blushed.

"No fraternizing," barked Savage. "Gax, what's up? Out with it and no clowning around!"

Gax shrugged. He jerked his thumb at the far wall. "See for yourself, Doc."

On the wall was Little Orphan Annie. Her arms were folded and she was tapping one foot, glaring furiously out of her round white eyes. She was two-dimensional, but very much alive. Suddenly

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above her head appeared a balloon containing the words, "Are you the chief of this crazy outfit?"

Rake fell back, stunned. Wanda grabbed his arm; Morehouse just stood there.

Gax said, "Excuse me, Doctor, but her sound track gets stuck." He slapped the wall a couple of times and Annie gasped and spoke.

She said, "Are you the chief of this crazy outfit?"

Although badly jolted, Rake said, "Uh, yeah! But how did *you* get here?"

Annie gave a short bitter laugh. "Are you kiddin', Thick-face? You engineered the whole thing! And if you molest me, or harm one hair o' my head, I'll have Punjab trapdoor you into the fifth dimension!"

Rake licked his lips, which tasted like cardboard. He took a minute to study the situation calmly. It appeared as though a color slide were being projected on the wall; but there was no projector. Little Orphan Annie stood in a back alley in broad daylight. Rake could see a row of garbage cans, trees, the rear stairs of houses, a brilliant blue sky with a couple of fleecy clouds. The trees moved in a gentle breeze; their leaves rustled; one leaf fell to the ground at Annie's feet; it was colored brown and orange and it had a narrow brown border drawn around its edge. Rake's curiosity got the best of him. He touched the colored picture, and was horrified to see his hand and arm *slide right through*—turn into a two-dimensional hand and arm seemingly drawn right on the surface of the wall! With an exclamation, he snatched his hand back, and Little Orphan Annie gave a nasty snicker.

"If *this* scares you, wait until you get trapped in Dimension Five," she said cruelly.

"Now just a damn minute," Rake said. "Can't we be friends?"

"With *you*, you kidnapper? Hah."

"In that case we'll be right back," said Rake. He propelled Wanda and Morehouse into the corridor and slammed the door.

"You *idiot*," he snapped at Morehouse. "What made you give Gax comic books to read?"

"How was I to know? You told me to acquaint him with this culture. You're the department head—why didn't you check the original reports?"

Wanda said, "Oh, Rake, this is terrible. What are you going to do?"

"Well, let's not get excited," said Rake. "I never realized that Little Orphan Annie could be so downright belligerent, did you?"

Morehouse said, "She's upset because Sandy bit an attendant and is now muzzled in the lab, being tested for rabies."

Rake groaned. "Why couldn't you at least keep it simple?"

"Don't blame me," Morehouse

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said angrily. "It happened after I phoned you. I called the attendant to help me and he stuck his hand in and Sandy took a bite out of it, so we grabbed Sandy and hauled him off to the lab, and Annie got mad, and half an hour later you waltz in and start giving me hell."

"Well, it's nobody's fault," Rake said, visualizing how all this would look on a report. "Wanda, get back to the PX. Morehouse, you wait here. If I yell, rush in fast. I'm going to try to reason with that little brat, and get her to go back where she came from, and put an end to this nonsense right now."

He entered Gax's room and approached the far wall, smiling in a friendly, sincere manner.

"Well, well," he said heartily. "Little Orphan Annie in person, after all these years! I can't tell you how *thrilled* I am. What are you now—about a hundred and fifty years old? And still wearing the same red dress, how nice, and your hair still bright orange and frizzier than ever! This gives me *such* a wonderful sense of continuity. Do you mind if I call you L.O.A.? And you can call me Doctor Savage."

Annie was speechless with rage. Rake knew he was sticking his foot in it, but he couldn't stop talking. "And how nice: you're wearing the same belt, the same stockings, the same shoes—what darling accessories—did you buy that outfit off the rack, or who designed it for you?"

"Of *all* the goddam *nerve,*" Annie said, slow and cold.

Rake laughed, confused. "I didn't mean it that way; I'm really a great admirer of yours. Why, I remember the time you beat up eight Communist hoodlums all at once, single-handed, and I remember all your little talks about goodness, and morality, and if 'Daddy' Warbucks were president he'd make everybody *good,* just by example, and—"

"Listen, Thick-face, I didn't ask to be dragged here and defamed by a cornball like you! The sooner I get back to my own comic strip the better, because yours stinks. I'm warning you: if 'Daddy' hears about this he'll have you pulled."

Rake was feeling cold sweat on his palms. "Meaning what?"

"Meaning you'll be yanked out of this strip, out of this space-time continuum, out of the minds of everybody who ever knew you; in short, *out.* Like you never even existed. Get the idea?"

"You wouldn't do anything so horrible."

But in his heart he knew she'd wipe him out (after all, why not?) on the slightest provocation. Inadvertently he thought of that TV commercial from Wolf IV, where the people are twenty feet tall—'For power and punch, an Earthman for lunch!'—and he knew

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things like this were no longer just nursery rhymes to scare the kiddies. . . . At that moment, Rake heard the noise of a motor and saw, a little to the right of L.O.A.'s curly orange head, a speck in the sky expand and take the shape of a tiny helicopter and expand some more, motor roaring.

Annie said, "Leapin' lizards, it's 'Daddy'! Now you're in trouble, Thick-face."

The helicopter grew full-sized and circled once and landed. 'Daddy' jumped out and raced toward them, diamond stickpin gleaming in the sun, round eyes shining with horror. "Annie, get back! It may be contagious!"

"Too late now," said L.O.A. glumly. "Anyway *The Reader's Digest* says it's similar to leprosy; takes years of togetherness before you finally catch the disease."

"I hope you're right," said 'Daddy,' uncoiling a rope on his waist and flicking it about in a virile manner. His eyes never left Dr. Savage. He said, "Isn't that disgusting? It's a nightmare come true. I've read in *Britannica* about these people with thickness, but who could believe in such a monstrosity? Look at his hands, his ugly, solid hands. And that face! It turns my stomach. He's too ugly to be allowed to exist. And to think: he exploits *us* for his cheap Sunday-supplement entertainment! Oh, you poor little tyke, if you only realized. . . . Annie, quick! Here comes a smaller specimen! Why, any zoo would pay a *fortune* for one of them!"

'Daddy made an expert rush at Gax, whirling the lasso and bellowing as he came. Gax grabbed a glass of water from the night stand and smashed it against the wall over 'Daddy's' round bald gleaming wealthy-looking head. 'Daddy' immediately turned to the side and disappeared.

"Isn't that a bitch?" Gax panted. "If you fight these 2-D creeps like a man, they turn to the side and disappear."

Dr. Savage was galvanized with panic and frustration. He began rushing around, gathering all the comic books and flinging them into the fireplace and setting fire to them with his lighter. He heard Gax scream, and whirled; but it was too late. Warbucks and the giant Punjab were already cramming Gax into the helicopter, and out of Gax's mouth flowed a long white balloon containing the heart-rending words, "EEEEEEK! DOC! HELP!. . . ."

Before Rake could even get to the wall, they took off and buzzed away.

In the back seat of the helicopter, L.O.A. thumbed her nose at him. The helicopter dwindled and disappeared.

"Morehouse!," Rake yelled, distraught.

Morehouse came bursting in.

Rake said, "They got Gax! It

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happened so fast! How will I face a board of inquiry!"

The empty frame stood like a challenge, sunlight on the garbage cans, trees rustling gently in the breeze.

"You could go in after Gax," Morehouse suggested.

"*You* go in after him! That's an order!"

"*You* go! You're head of the goddam department!"

"*You go!* It was your stupid mistake!"

"Me? All I did was follow your orders."

"All right, all right," Rake groaned. "Frankly, I wouldn't step into that lousy comic strip for the biggest prestige job in the galaxy. Let me think! My head is pounding."

He sat on the bed, wincing. "First of all, get that dog back where he belongs, and do it fast. Then maybe they'll return Gax."

"No, Doc; I've got a better idea. Let's keep Sandy for a hostage. Maybe we can force them into an exchange."

"So do it your way," Rake groaned, aware that they were playing Monopoly with Doom, but beyond caring.

Half an hour later Savage was at his table at the PX, consuming alcoholic drinks from Earth, watching Wanda do her big production number in the sequined nude with a chorus of mixed horned midgets from Aldebaran. Drinking alcohol was bad, Rake knew; it ruins your liver, solidifies your arteries, turns you into a bellicose weeping idiot, and sours your breath, unlike the sweet Mexican pot which gives you healthy, happy, far-out dreams and is approved by Central Ingelligence (after 120 years of testing under all conditions). But everything was lousy, and Rake felt ashamed of his cowardly failure to rescue Gax; so he sat and belted down Scotch.

After her number Wanda rushed to his table in a ruby-studded negligee and sat down, excited. "Have you seen the morning papers?"

"No! Don't tell me they've heard about the kidnapping! I'm ruined!"

"Of course they haven't. But this is *worse,* Rake." She opened the funnies. "Look at Little Orphan Annie. See here? Gax is now a character in the strip!"

"What!" Dr. Savage was stunned. He grabbed the paper and read wildly. " 'Well, Gax, I'm sure glad t' have you for a friend,' Annie says here. Gax is grinning, and 'Daddy' says, 'He's our kind of folks, Annie; not like those greedy 3-D people who exploit our miseries for their own fun, without giving us a penny in royalties'— So that's how they recruit their personnel," Dr. Savage said grimly. "Well, we'll get him out of there if I have to get drunk enough to go in after him!"

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"Rake, you can't! What if they kept you there? How embarrassing. Imagine having your private life smeared all over the comic strips."

"I don't know," Rake sighed wearily. "What *is* reality, anyway? I suppose you can adjust to anything. . . . I'd much rather be kidnapped by Brenda Starr, though."

Wanda's eyes flashed. "All right, go ahead, and I'll be kidnapped by Steve Canyon."

"Let's not fight," Rake murmured. "It's just that that nasty little bulldyke, L.O.A., is not the type I long to be marooned with. . . . .Waiter! Bring me a phone."

"Morehouse," he rapped out when his assistant appeared. "I want you to have another Callistan imported, immediately. No, no, don't argue! We have no choice! And do it fast before it's too late, understand? . . ."

Three hours later, Savage was giving the new Callistan, whose name was Zoon, an inkblot test.

Morehouse watched. "How does it look, Doc?"

"Lousy, but it's our only chance," Savage said grimly.

"And this blot looks like a guy killing a guy," Zoon said. "And this blot, it looks like a man choking another man with a piece of piano wire. And this blot; why, that's odd; it looks like a guy killing a guy. And *this* blot—now there's an unusual one; it looks like a guy stabbing a guy with a butcher knife!"

"That's enough," barked Savage. "Bring in the literature, Morehouse. We should have our answer in a matter of minutes."

They supplied Zoon with *The Collected Sherlock Holmes*. Zoon read avidly, and soon Holmes himself materialized on the wall, lying asleep on a couch in his Victorian study. Rake could see all up and down Baker Street out the window. There was a brand new black-and-gold hansom parked in front, driver dozing in the sun, horse eating oats, a gang of ragged urchins pitching pennies in the gutter. The houses were pure Old London—the trees, the spires in the distance, the whole scene fascinated and thrilled Rake; he wanted to see more, but Holmes opened his eyes and stared, with the most heavy-lidded, piercing gaze Rake had ever encountered, at the two psychologists.

The magnetism of the man was unsettling. Rake was glad Wanda wasn't around; he knew that she would go for this tall cool English type. He gathered his wits and said, "Mr. Holmes, I'd like to hire you for a little job."

Holmes yawned. "Come up to present time, Doctor."

"Meaning what?"

"I've been *the* man in the detective field for 200 years, right?"

"Right."

"So trying to hire me is like drafting Tutankhamen to run for president. Theoretically it's possi-

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ble, but only to a very subtle, powerful intellect, with an enormous expense account."

"Uh—how did you know you've been the top detective for 200 years?"

"First, there's a calendar on the wall behind you. Second, you aren't out hiring James Bond or one of the Sam Spade offshoots. Third, I recognize consuming hero worship when I see it." Holmes stretched and rubbed the back of his neck. He reached up with languid grace and closed the window. "No use contaminating our picturesque nineteenth century with your canned lunar air!"

"How did you know this is the moon?"

"Not being exactly blind, I see the full Earth out the window."

"What kind of a doctor am I?"

Holmes chuckled. "Rorschach papers all over the floor, endless test questions, Scotch on the breath— But why come to me? I'm working on the *Sign of the Four* and have no time to lose."

"Help me and I'll give you the solution!"

"Tut tut, that wouldn't pay; time refuses to bend. You'd go out like a candle."

"Say, Annie threatened me along those same lines."

"And who is Annie?"

"Little Orphan. You've heard of 'Daddy' Warbucks?"

Holmes thought. "The comic strip tycoon?"

"Right. He kidnapped a patient of mine. I want you to track him down."

"Impossible."

"Why impossible?"

"Booked solid! You should try someone like Dick Tracy."

"A splendid idea," cried Savage. "By the way, are you still on cocaine?"

Holmes laughed aloud. "By all means. It opens up many a sealed vault. Here, let me give you a signed testimonial to show your local police."

"They'd scream! They use nothing but pure, wholesome marijuana. Frankly, us marijuana smokers would rather fight than switch."

"How nice for you," said Holmes "While we're chatting, whatever happened to Conan Doyle?"

"Died."

"And after that? . . . But I can see you've got a lot of evolving to do; don't let me stand in your way," and Holmes disappeared.

"Wow," said Savage. "But no time to waste. Go dig up a stack of Dick Tracy comics, on the double."

After the comic books were collected, Zoon was instructed to start reading. Soon Dick Tracy materialized on the wall. It was night there, with a full moon in the upper left-hand corner above police headquarters. Seeing them, Tracy yelped and shielded his face. "No pictures! I'll *sue* you lousy rats! Who says I can't claim Junior as a dependent? So what, he's a hun-

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dred and ten and a half! And that city-hall payoff is a legitimate deduction. And it's a stinking lie I've been cleaning up on tax free protection dough in the first ward—"

"Easy, Tracy, easy," Rake soothed. "We're not from Internal Revenue. We just want you to do a little job for us."

"What kind of a job?"

Savage told him. The pinpoint eyes grew thoughtful under the yellow snap-brim. There was some haggling over fee, but Tracy finally jumped at eight pecks of lasers (to sell to the death-ray factory) plus a truckload of raw photons (illegal here, Tracy explained, because they turn you on to sheer mad joy when mixed with frozens shadows and belted down).

Then the wall went blank.

Rake paced the floor. He cracked his knuckles, sent out for coffee, ate some aspirin and paced the floor some more. Zoon picked up a copy of *Our Lady of the Flowers*, by one Jean Genet, but Rake snatched it out of his hands. Zoon picked up a Golden Bible but Rake screamed and confiscated it. "Go play with boats in the bathtub," he ordered. He groaned, staring at the full Earth out the window. An unbelievable sight, that great globe hanging in the western sky! Impossible to realize that a couple billion creatures not only lived on it, but actually took it seriously, considered it of consuming importance. Rake brooded, Rake paced, Rake sighed. Finally Dick Tracy re-appeared, his square jaw set.

"Bad news," Tracy said glumly.

"What! What bad news?"

"Gax won't come."

"Gax won't *come?*"

"That's right. He says to tell you your reality is a mess and a mistake from the beginning, and he's converted. Says that Little Orphan Annie's strip is by no means the Elysian Fields, but at least it makes more sense than *your* strip."

"Dammit, this is not a comic strip! This is real life!"

Tracy smiled sympathetically. "That's what they all say," he soothed.

Rake sank down into a chair, shattered. "Well, that's that," he said. "I'm ruined. I'll be blackballed all over the galaxy; I'm cooked."

Zoon was looking at Tracy's hand with a magnifying glass. He said, "Hey, Doc, did you ever notice that this guy is made up of a bunch of little colored dots?"

"It's a lot more high-class than protein molecules," Tracy said stiffly.

"I'm absolutely dead," Rake moaned.

Zoon said, "Doc, you talk like a cube. All we gotta do is substitute my passport for Gax's, claim Gax never existed, and send me to Earth instead."

"By gad, there's a plan!"

Zoon smiled. "I'm more the type anyway. I'm an other-directed con-

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formist, crazy about mass culture and big white lies and all that. Why, you should see me dodge responsibility while making speeches about how responsible I am!"

"Splendid," cried Rake. "You sound like an old-line Earthman from way back."

"I am, I am! I'd do *anything* for security. And just think: in the zoo, I'd have tenure. For that I'll flatter everybody night and day. I've studied your advertising and I understand the method. Why, Gax would just act independent, and insult those Earth snobs, and wind up in front of a firing squad."

"H'm," said Rake, caressing his chin thoughtfully. "One point: don't materialize any more of these two-dimensional horrors, understand? Because if you do, they'll ride you right out of Earth on a rail."

"Doc, do I look like a nut? All I want to do is conform."

Rake had forgotten Tracy. The detective was quivering with rage and insult. "Two-dimensional horrors!" he shrieked. "Why you thick-faced, self-centered little monster! You freak, you can't insult a big name and get away with it! I'll ruin you! I'll 2-D your head and leave your body in the round! I'll kidnap all your sexy Polarians and let Earthwomen rule the world again! . . . Say, *there's* a punishment and a half," and he turned to the side and disappeared.

Zoon was outraged. "The nerve of that second-class citizen, calling you names," said he. "But the hell with him. I got another wonderful idea. Know what you can send to Callisto in exchange for me? This."

He picked up the goldfish bowl and set it in Rake's hands.

"But that's nothing but an ordinary dime-store goldfish," Rake said.

"Shh, Doc, my God, you've insulted enough groups for one day," Zoon whispered. "No kidding, look. Look with the eyes of a Callistan. Have you ever seen anything more unbelievable?"

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Rake looked at the goldfish. It opened and closed its little mouth, staring back at Rake. Yes; when you stopped to think of it, here was a solid gold, goggle-eyed individual alive in a genuine watery world, so near and yet so far, with translucent fins, gently stirring the water, and its eyes mirroring eons of undistilled history. . . .

"Perfect! We'll send the fish to Callisto," Rake said happily.

Zoon said, "Fine, and earlier today I had the idea copyrighted, and my attorney has drawn up a little agreement here giving me ten percent of all you guys make off this fish in the future, so if you'll just sign right here—"

"Release Sandy," Rake ordered.

An attendant came in with the dog. Rake watched with interest as the attendant led Sandy around the walls of the room. The leash was 3-D; it went from the man's hand to Sandy's neck. Sandy bent at the corners of the room. On his face was the traditional look of the disdainful aristocrat manhandled by a dim-bulb peasantry.

Rake said, "He tested negative, I presume?"

The attendant looked sheepish. "We couldn't test him. We couldn't take a saliva sample, we couldn't stick a hypo into him, it kept coming out the other side, and he would laugh; it was embarrassing."

"Well, just let the S.O.B. go and hope we never see him again."

The attendant unsnapped the leash from Sandy's neck, and Sandy with a parting sneer bounded off down the alley.

When Rake went out, the attendant was sweeping up all the balloons containing the word "Arf" and dumping them gingerly into the ashcan.

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BOOKS

I DON'T LIKE PROGRAM NOTES. IF I read them at all, it is only *after* the concert. At art exhibits, I use the catalog to check on a piece I've already looked at enough; time enough then to find out what the exhibitor, or even the artist, thought I should see in his work. As for prefaces, I turn back to them enthusiastically, if—and only if—the contents of the book have made me curious about the comments.

The first item on the table of contents of THE WORM RE-TURNS* is a "Compulsory Preface" by the editor; right after it is an introduction, "Behold the Lowly Worm," by Arthur Koestler, which the book jacket also lists as "compulsory."

I compromised and started with Koestler. If you share my stubbornness in such matters, I suggest you fight your own compulsions this once, and go along with Dr. McConnell's. The book will be hilarious either way, but if you know where it came from, and what it's all about, it will be even funnier. (Of course, if you are already one of the 2000 devotees of the *Digest*, you already know what the giggling is about.)

THE WORM RE-TURNS is a selection of spoofs, satires, fantasies, parodies, verse, cartoons, science-fiction, and surreal-science, from the first five years of a remarkable publication which is the offshoot of the remarkable achievements of a remarkable group of people whose efforts center on the work of Professor McConnell's Planaria Research Group at the University of Michigan's Mental Health Research Institute. These are, of course, the world's worm runners.

What they do is run worms through mazes, subject them to electric shocks, split their heads and slice off their tails, and educate them by feeding them to each other. What they *have* done with all this activity is establish firmly that—in asexual reproduction at least—acquired characteristics *can* be inherited. (That's right; here we go *again*.) What they do in their spare time is write lab reports the-

*THE WORM RE-TURNS, The Best from the *Worm Runner's Digest*, edited by James V. McConnell, Prentice-Hall, 1965, 182 pp., $3.95.

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oretical essays, letters, and nonsense of all sorts for the *Digest*—which is probably the only publication which consistently parodies itself, being as it is half dead-serious scientific journal and half . . .

Better let McConnell say it. From his preface: "I believe that the *Digest* is proof that a great many scientists can appreciate humor even when it's pointed at their own life's work, that a scientist can be both half-serious and half-wit."

The book is entirely from the witty half. Among the choicer chortles selected for the RE-TURN are a group of pop-eyed planarian cartoons by Mumme; a lesson in *Logogenetics* by Damon Knight; a deadpan delight entitled "The Effect of a Prefontal Lobotomy on the Mounting Behavior of the Congolese, Red-Eyed, Thyroidectomized Tsetse Fly;" a small nightmare of "A Bedtime Tale for Astronods" called "Population Debris;" and some neo-cuppian historical discoveries like "Einstein's Girl Friday," "How Newton Discovered the Law of Gravitation," and "The Truth about Mendel."

Then there is Peter Runkel, fablist and versifier. To sample the sampler:

The conspicuous thing
About a worm
is: he's never loose
but: he's never firm

Each end's the same
for all intent
yet I suppose (though nobody knows)
One is 'go' while the other is 'went' . . .

"Body Ritual among the Nacirema," (the original users of Serutan, no doubt) is an anthropological study which may yet undermine the entire American plumbing industry. "On the Nature of Mathematical Proofs" is . . .

Well, all I *meant* to do was pick out a few favorites. And I haven't yet mentioned the bulk of the volume, which consists appropriately enough of psychological and psychiatric psatires. Here, for the first time in a single volume, are the original reports on such provocative new schools of thought as hydroanalysis, tail envy, the foodian psycholosis, nasal psychosexual development, the cokological projective technique, and *lots* more. Finally, there is McConnell's own "Learning Theory," one of the more memorable stories from the old (Quinn) *Worlds of If*.

Mr. Koestler's Compulsory Introduction provides a vivid and comprehensive account of the background and history of worm-running itself, and the significance of the worm runners' findings so far. He starts by saying:

"One of the last Palinurian joys of civilized middle age is to sit in front of the log-fire, sip a glass of brandy, and read the *Worm Runner's Digest*."

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THE WORM RE-TURNS is the *Digest,* distilled.

—JUDITH MERRIL

NOTE:

This is Anthology-Catchup Month at F&SF Books. As editor of an annual anthology which at least tries to make good its titular claim to being the "Year's Best SF," I feel it would be inappropriate for me to review other anthologies in the field. The rest of this column has therefore been prepared by Fritz Leiber and Ted White.

—J. M.

WORLDS OF WEIRD, Selected by **Leo Margulies,** Introduction and Notes by Sam Moskowitz, Pyramid, 50¢

THE DARK SIDE, Edited by **Damon Knight,** Doubleday, $4.50

SPACE, TIME & CRIME, Edited by **Miriam Allen deFord,** Paperback, 50¢

THE EIGHTH GALAXY READER, Edited by **Frederik Pohl,** Doubleday, $3.95

These four anthologies show a 30-year shift in imaginative fiction away from often doomful tales of weird tabooed far-off things by authors somewhat alienated from the here-and-now, to largely optimistic extrapolations from the technologically exploding present by writers excited about (though often highly critical of) the here-and-now.

Margulies' current dippings into the moldy shimmering *Weird Tales* barrel result in a potpouri typical of the magazine:

A moving, much imitated story by Edmund Hamilton about a boy born with wings.

A nasty insidious tale of the Middle Ages demonstrating that Clark Smith knew a great deal about the linkage of sex-fears and witchcraft —quite as much as G. Rattray Taylor demonstrates in his book *Sex in History.* Yes, *Weird Tales* dealt with sex, often intelligently, at a time when SF magazines wouldn't even peek at the ugly-headed stuff.

A stirring saga wherein a brawny Aryan defeats with poisoned arrows and cold steel a gigantic jelly-fleshed Lovecraftian monster—Robert Howard at his chanting, Jack Londonish best.

A silly overblown saga by Nictzin Dyalhis, the man with the shtrange name and shloppy style; it starts off as the crudest wish-fulfillment (You sit cross-legged on the floor, concentrate, and—*Click!* [*sic*!]—you're an armored king in another dimension sword-slashing two dozen hideous dwarfs to win the most beautiful woman in Octolan) and ends with an anticipation

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(1934) of the overrated wacky-(mytho)logic tales in *Unknown* (1939 *et seq.*).

One of those easy-to-conceive, impossible-to-achieve whopper science-fantasies: a tale of sundered dimensions written from both sides of "The Diamond Lens." Frank Long creates beautifully atmospheric rainbow pictures, yet fails to convince.

Finally, a new legend of Santa Claus. *Weird Tales* dared everything! See, there's this humanistic Viking who saves the infant Jesus from King Herod's men, decides when he sees him hanging on the Tree that he is Baldur the Beautiful come again, roves down the centuries as the Wandering Blond Goy with immortal maid-at-arms in attendance, and finally joins with some Lapp warlocks and their reindeer to become . . . yep, that's right. All this sauced with Seabury Quinn's sleek style and considerable erudition, but—*hein, sacre bleu* and name of a little blue man! —this one prefers Jules de Grandin!

Moscowitz's aggressive honor-'em-all annotations include some fascinating data. Turns out *Weird Tales* was launched by the publisher of *College Humor* to implement his love of Edgar Poe and that Howard Lovecraft turned down the job of editor.

Knight's anthology could be subtitled *Supernatural Horror and Comic Fantasies by Science Fiction Writers* and is conceived in the spirit of, "Our SF boys can do 'em just as well as the *Weird Tales* weirdos—if not better!"

In the first category, Knight's contention is well supported by Sturgeon's horrendous "It" (the forest scenes in the first Karloff *Frankenstein* movie made realer than cinema), Heinlein's "They" (that forever disturbing story of the paranoid dilemma), and Wells's "The Story of the Late Mr. Elvesham" (Old H. G. could easily have been the leading horror writer of our age if he'd thought it worthwhile)—and almost as well by Bradbury's "The Black Ferris" and Davidson's "The Golem."

Helping hold the horror line are two excellent realistic tales of the fantasies which the human mind creates when faced with overpowering fears: Richard McKenna's stark yet heart-warming "Casey Agonistes" and Peter Phillips' deadly "C/O Mr. Makepeace," though the latter is given a final half-hearted psionic twist by a quote from a book by Nandor Fudor, Freud's gift to the realms of ectoplasm.

The comic fantasies are not as effective, though Gold's "Trouble With Water" is the best laugh *Unknown* ever tickled off.

Knight's use of "the dark side" to mean all fantasy save SF jars a little. *Alice* and *Dracula* in the same black closet! But perhaps it

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has never occured to Knight to be afraid of the dark.

DeFord's thoughtful assembly of science-fiction tales of crime, punishment—and a little detection—advances us toward the target of the 30-year trend. The strongest stories here are the ones closest to reality, with the SF frame simply putting the picture in sharper focus: Francis McComas' portrait of a prison during a world-wide catastrophe when only the best human beings (but who are they?) can be transported to Mars to survive; Pohl's harsh-etched views of a Nazi death camb and other human horror-spots as seen from a future in which criminals are sentenced to days or weeks in such places by time-travel or, more likely, mind-wrenching; Bretnor's lethally quiet study of a bitter little person nibbling a big person to death by magnifying a small guilt this story is pure realism except for an optional touch of extrasensory perception); and Davidson's blazing statement of the case of American Indians victimized by bland injustice and theft.

Obviously these stories are searchingly critical—as of Mike Hammers in petticoats whose gossip is grease-gun fire, of penal systems that don't rehabilitate, and of just our own sweet selves. James McKimmey's "The Eyes Have It" is a comic inferno (*see ahead*) of man's effort to enforce on the Martians the blessed institutions of newspapers, glad-handing, vice squads, religion, and wrestling.

The remaining stories are mostly in the lighter yet extremely difficult form of future mysteries soluble by knowledge available to a modern reader. Among these, Poul and Karen Anderson's "The Innocent Arrival" delights by its bouncing lightheartedness.

Pohl's dozen, all stories from the last five years of *Galaxy,* let us sample at its pepperiest the current end-product of the 30-year shift. Certainly these stories take off from the here-and-now: they bustle and whirl with the pressures of living in a fast-changing competitive democracy of big organizations, or else explore the greater strains that will be imposed on a few by the exploration of space.

At least five of the stories are comic infernos: Kingsley Amis' name for tales which jolt characters and reader alike by a series of satiric surprises and unanticipated frustrations, mostly involving technology and money, with the pace quickening toward the climax like the music of Dukas' *L'Apprenti sorcier*. Typical is C. C. MacApp's imagining of coffin manufacturers goosed by a computer's mistake into a monstrous selling program. Chandler Elliot does the same for freehand freeway driving. In Brian Aldiss'—*nom de nom*!—*Comic Inferno* it's future publishers and

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their humanoid robot servants, a curious combination. Two not-quite-so comic infernos involve armament escalation: a mad joke by Albert Bermel and a remarkably compact study of civilian shelters, baseball hypnosis, competitive careering, and almost everything else by Pohl and Kornbluth: *Critical Mass*. Dick's lively vivid variant on Poul Anderson's Sam Hall story seems to fit in here too.

Two of the remaining stories slash out at the conceit and xenophobia of future yokelry, with the authors on the side of the violet caterpillars, of course. Three others tell of the conquest of space: Thomas' "The Lonely Man," notable for its strong characterization; Clement's "Hot Planet," which handles the exploration of Mercury with such realism and originality that it had NASA writing the editor to find out more; and Harry Harrison's "Final Encounter," which tackles an idea almost as impossible-to-achieve as the Long story aforementioned and brings it off.

On the whole, we seem to have reached the point where science fiction isn't escape any more and where there's a lot of propaganda for the viewpoint that mankind can do something about any problem at all, including death and taxes. Whistling fortissimo in the dark? Or the beginning of the beginning?

Perusing these anthologies in the quiet of his kitchen, the reviewer discovered (ha-ha!) three little stories of his own—whistlestops. He also dicsovered (no ha-ha) that all three deal with the universe conceived as a gigantic machine with computer-like brains. A fantasy author hypnotized by SF?

—FRITZ LEIBER

WORLD'S BEST SCIENCE FICTION: 1965, Donald A. Wollheim & Terry Carr, eds., Ace Books, 50¢

In this, the first volume of a projected annual series, Ace has launched a competitor to Judith Merril's own yearly series. The book is by no means as inclusive as Miss Merril's attempts to be, but has the advantage in timeliness; all seventeen stories originally appeared in 1964. Editors Wollheim and Carr have also chosen a more direct and hard-core sf approach; two stories are from *Amazing Stories*, two from *Analog*, two from the British *New Worlds*, three from *Galaxy*, and five from F&SF. The remaining three are not from sf magazines.

As a survey of the best of last year's magazine output, the book points up the problems sf magazines have had in finding good short material. Only John Brunner's "The Last Lonely Man" and William F. Temple's "A Niche in Time" are unflawed in construction. The remaining stories, the best among them Tom Purdom's "Greenplace," Norman Kagan's "Four Brands of the Impossible," Edward Jesby's "Sea Wrack," and

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Thomas M. Disch's "Now Is Forever," are all incomplete in some respect, some more *incident* than *story,* but—and perhaps this is because all are by younger, newer, and less professionally accomplished craftsmen—each is more vivid and more emotionally compelling.

But they paint a bleak picture of the world; pessimism runs riot through this collection as we are confronted by a succession of unpleasant societies in which human thinking has taken a wrong turning, or reached a dead end. This is not, I think, a healthy trend for the field.

An attempt has been made to live up to the title (WORLD'S BEST) and to make the collection truly international in scope by including, in addition to the two stories from *New Worlds,* two translations and the work of Australian writer Colin Free. Free's story is a repellant dystopia story, but well written. The other two, by Josef Nesvadba and Harry Mulisch, probably suffer from translation, but are bad stories in any case, and I'm doubtful they would have been considered if they'd been the work of domestic authors.

One hopes that the state of the field will allow a better volume next year.

—TED WHITE

A CHECKLIST OF SCIENCE-FICTION ANTHOLOGIES, compiled by **W. R. Cole,** introduction **by Theodore Sturgeon,** $7.50

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COMING NEXT MONTH . . .

May we impose upon our readers to stretch their minds and imagine what would happen if *hostile creatures from outer space landed here on Earth!?* Are we kidding? Not at all. To say more about next month's feature might spoil a fine entertainment surprise. Watch for THE SALIVA TREE, a complete short novel by **BRIAN W. ALDISS**—coming in the September issue, on sale July 29.

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Messrs. Janifer and Treibich provide us with a short and funny rendering of man at his most insignificant moment.

FIRST CONTEXT

by Laurence M. Janifer and S. J. Treibich

THE THING, WHATEVER IT WAS, first appeared on a BMEWS screen, and for about three minutes a not-too-bright technician thought it was the lost Mariner rocket.

The Mariner rocket, however, had been going out when last heard from. This thing, whatever it was, was coming in. And it was clearly in controlled flight, something which couldn't, unfortunately, be said of the Mariner.

"We think," Johnny Grant kept assuring the gaggle of Generals, Admirals and other high and worried brass, "it's been blown up. But it was too far out to tell—anyhow, it can't fall back."

"You're quite sure of that?" one of the Generals asked in a snappish, tense tone of voice.

"Quite sure," Johnny said soothingly. "It was going too fast. Escape velocity, you know."

Whereupon he had to explain what escape velocity was, what an orbit was for, and (question asked by a Coast Guard gentleman who had shown up at somebody's careless invitation) what the Mariner had to push against, way up there in the void.

While he was straightening out these various tangles, word of the thing, whatever it was, filtered into the control room. What it seemed to be, everybody agreed (except Johnny Grant) was a flying saucer.

"There aren't any flying saucers," he said despairingly. "Maybe—"

"It's homing in on us," a Tank Corps General said. "Controlled flight. Too slow for a bomb. What else can it be?"

"It isn't a weather balloon," a Navy Admiral put in. "Or an observational error." By then, four separate stations had reported the thing, whatever it was. And it was coming closer.

"There were no flying saucers at all," an Air Force General said stolidly. "Until now."

"But—" Johnny Grant said, a little tired of all this brass.

He never got the chance to say

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any more. There was a great roaring sound and the sky was suddenly very light.

Johnny Grant was standing in front of one of the control room viewers. He looked at it.

Apparent height, six hundred feet. Apparent dimensions, incredible.

And it just hung there.

"Gentlemen," Johnny Grant said, "it looks as if I were mistaken."

The saucer opened a hatch on its underside. A box left the hatch and sailed slowly toward the Cape Kennedy firing area, where another Mariner waited hopefully.

The collected brass (and Johnny Grant) resigned itself to death. Sudden, blasting, unearthly death.

The box didn't explode.

The saucer went away.

Ninety-seven minutes passed.

"Well?" asked a Marine Corps General.

Johnny Grant took a deep breath. "Well, what?" he asked. "Sir," he added hastily.

"Shouldn't somebody investigate this—this thing, whatever it is" asked the Marine Corps General, looking intrepid but too old for the job.

"By all means," a Navy Admiral added. His head turned.

Other heads turned as well.

Johnny Grant found himself the focus of all eyes.

"But —" he began.

"They didn't blow us up," the Air Force General said. "They're an alien race. Maybe they have a message for us. Help — a brotherhood of planets. Learned our language from radio broadcasts. Now they want us to join the Galactic Federation."

"But —" Johnny Grant said.

"Of course, it could be dangerous," the Coast Guard Admiral said. "Deadly radiation. Changes men's minds. Makes them into monsters. Hairy and with teeth. Like in the movies."

"Maybe it'll blow up even after such a long time," a Navy Admiral said. "It could be waiting for us."

Johnny looked around the control room.

Then, without a word, he shrugged, and began to undo the hatch that led to the outside.

"Good boy," an Artillery General said. "You'll get a medal for this."

"Posthumous, if necessary," the Marine Corps General added.

Johnny stepped out, and began to walk toward the box.

Ten minutes later, he was back.

"They learned our language from radio broadcasts," he said.

"Aha," the Air Force General said. "Galactic Federation. Brotherhood of planets."

"Hmm," the Coast Guard Admiral said. "Does he look any more hairy to anybody? More monsterlike, sort of?"

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"Does the box tick, even a little bit?" asked the Navy Admiral.

Johnny shook his head. "There was a piece of paper in the box," he said. "I guess we didn't manage to blow up the Mariner."

"What?" several Generals and Admirals said, more or less at once.

Johnny Grant sighed. "They dropped us a traffic ticket," he said. "Fifteen thousand dollars in gold. For reckless driving."

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SCIENCE

BEHIND THE TEACHER'S BACK

by Isaac Asimov

IN THE COURSE OF WRITING THESE essays, I have developed several bad habits. Partly, this is because I have a natural affinity for bad habits and partly because I am given such a free hand that it is hard not to pamper myself.

For instance, when space runs out and I am feeling Puckish, I commit a cliff-hanger and end with an indication that there is more to the story I am telling and that I will reserve the rest for another column some day. Afterward, I may write that other column or I may not. It depends on my lordly whim.

A second bad habit is that of constantly referring to my genial audience as "Gentle Readers." The phrase originated, of course, as an indication that the readership was well-born and possibly of noble descent. In our own egalitarian society, the phrase has lost its aristocratic connotation and one can't help but think of the gentle readers as being kind-hearted, tender and sweet. And so they are, so they are, but not always, I'm afraid.

My persistence in the first bad habit has just uncovered an exception to the generalization involved in my second bad habit.

In my article THE CERTAINTY OF UNCERTAINTY (F & SF, April 1965), I concluded:

"If the uncertainty principle did not exist, neither would the universe as we know it; for the existence of all atoms other than hydrogen depends on the uncertainty principle.

"But my space, alas, is used up.—Another time?"

Within a matter of days, I received a letter from a Fierce Reader.* Without a gentle word anywhere in it, she slashed away at me for

*A young lady—undoubtedly beautiful.

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having dared drop the subject of the uncertainty principle in the middle. "Is the continuation coming in the next issue?" she blazed.

I had to reply that it was not; that I hadn't given the matter much thought, and that I had thought that any time in the next year or two would be soon enough. However, since she sounded so savage, I thought I had better change my mind and write the continuation at once, for the August issue.

She replied with the smoldering threat of "You'd better!"

I hasten, dear lady, I hasten—

In order not to make things too dull, let's continue the story of the uncertainty principle by talking first of what seems to be a different subject altogether. This different subject we can call, the Dilemma of the Atomic Nuclei that Shouldn't Be.

The New Zealand-born physicist, Ernest Rutherford, had conclusively demonstrated the existence of the atomic nucleus by 1911 and for twenty years after that its general structure seemed established. Atomic nuclei were considered to consist of two types of particles, protons and electrons, each of the former possesing a unit positive charge (+1) and each of the latter possessing a unit negative charge (−1). The protons, always present in excess, lent the nucleus a net positive charge.

The one exception to this general rule was the simplest nucleus of all, that of the more common hydrogen isotope. It consisted of a single particle, a proton, and nothing else.

As examples of more complicated situations, the most common oxygen isotope had atomic nuclei made up (it was thought) of 16 protons and 8 electrons for a net charge of +8; the most common iron isotope had nuclei made up of 56 protons and 30 electrons for a net positive charge of +26; the most common uranium isotope had nuclei made up of 238 protons and 146 electrons for a net positive charge of +92; and so on.

This seemed to make sense. The protons in the nucleus, all of them positively charged, repelled each other on the well-known electrical principle that "like charges repel." However, if one placed electrons strategically among the protons, the attraction between protons and electrons (opposite charges attract) would neutralize the repulsions and allow the nucleus to hang together.

The electron could be considered a kind of "nuclear cement" and without it, it would seem, none of the nuclei could exist except that of hydrogen.

Physicists were, however, by no means happy with the atomic nuclei in all respects. By dint of shrewd calculations, they had decided that

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both protons and electrons had spins that could be characterized by the numbers $+\frac{1}{2}$ or $-\frac{1}{2}$. That meant that nuclei made up of even numbers of particles should have overall spins equal to the algebraic sum of an even number of halves, plus or minus. Such a sum would always have to be a whole number, such as 1, 2, or 3.

On the other hand, nuclei made up of an odd number of particles should have spins equal to the algebraic sum of an odd number of halves, and this should always add up to a "half-number" such as 1 ½, 2 ½ and 3 ½.

Unfortunately it didn't work that way. As an example, consider the most common nitrogen isotope. It was made up (so physicists had decided in the Roaring Twenties) of 14 protons and 7 electrons for a total of 21 particles. Since this is an odd number of particles, the nitrogen nucleus ought to have an overall spin equal to a half-number, but it doesn't. Its spin is equal to a whole number.

Something was therefore seriously wrong. Either the nuclei did not have the structure they were thought to have or else the law of conservation of angular momentum was broken.

Physicists did not hesitate in their choice between these two alternatives. They have a peculiar affection for laws of conservation of this or that and would not willingly see one broken. Therefore, they began to turn looks of deep disfavor on the whole proton-electron theory of nuclear structure.

You can imagine, then, the thrill of exultation that swept the world of nuclear physics when, in 1932, the English physicist, James Chadwick, discovered the neutron, a particle that strongly resembled a proton except that it lacked an electric charge. And it had a spin of ½.

Scarcely allowing the neutron's discovery to grow cold, the German physicist, Werner Karl Heisenberg (the same who, five years earlier, had enunciated the uncertainty principle) suggested that atomic nuclei were made up of protons and neutrons rather than protons and electrons.

Thus, the nuclei of the most common oxygen isotope would consist of 8 protons and 8 neutrons and its net charge would still be +8, thanks to the protons. (The neutrons, being uncharged, would contribute no charge of their own, and cancel none.) In the same way, the nuclei of the most common iron isotope would be made up of 26 protons and 30 neutrons (net charge, +26), the nuclei of the most common uranium isotope of 92 protons and 146 neutrons (net charge +92) and so on.

The proton-neutron theory of nuclear structure could explain virtually all the facts of life concerning the nuclei, just as well as the proton-electron theory had been able to. In addition, it also fit the facts of

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nuclear spin with delightful accuracy. The nitrogen nucleus, for instance, by the new theory, was made up of 7 protons and 7 neutrons, for a total of 14 particles. Now it had an even total of particles and the overall spin could, with sense, be represented by a whole number.

The law of conservation of angular momentum was saved, by George.

There was just one gigantic fly in the ointment. According to the new theory, atomic nuclei other than those of hydrogen ought to be nonexistent.

The electron cement which had been counted upon to keep the protons in happy proximity was gone, and the protons were alone with their own company in the nucleus. (The neutrons were there, but electromagnetically speaking, they didn't count.) The nucleus was full of repulsion, a great deal of repulsion, and nothing but repulsion.

Within the nucleus, two protons are virtually in contact and are therefore separated, center to center, by about a ten-trillionth of a centimeter. The charge on each proton is terribly small by everyday standards, but the distance across which that charge need operate is terribly smaller. The result is that the repulsion between two neighboring protons works out to some 24,000,000 dynes.

This, needless to say, is a simply terrific force to be concentrated between a pair of objects as tiny as protons and if this were the only force involved, two protons held in such close proximity would remain together for the merest split-instant and then separate at velocities close to that of light. Indeed, in 1932, there was no good way of accounting why two protons should be in such proximity in the first place.

Since in all atomic nuclei, save in that of the atoms of the simplest element, hydrogen, two or more *do* exist in such proximity (with neutrons strewn among them, of course) it turns out that there was nothing, in 1932, to account for the fact that matter, other than hydrogen, existed at all.

Yet even the cleverest and most inevitable scientific reasoning must bow before the presence of even the crudest fact. Matter *did* exist and consequently something was neutralizing and overcoming the repulsion between protons.

Unfortunately, that "something" had to be another force and there was a shortage of known forces. All the forces known in 1932 were produced by one or the other of just two types of "force-fields."

One of these was the "electromagnetic field" which governed the attractions and repulsions among protons and electrons. It is the presence of this field which keeps atoms from making actual contact, since at

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close approach the negatively-charged electronic layers that fill the outskirts of one atom repel the negatively-charged electronic layers that fill the outskirts of the other. Most ordinary forces with which we are acquainted—the pushes and pulls of everyday life—depend on the fact that the atoms of one piece of matter are, at close quarters, repelled by the atoms of another piece.

The only force known in 1932 which was not electromagnetic in nature, was that of the "gravitational field" but it was quite clear that gravity could in no way counteract the mighty protonic repulsion within the nucleus. To be sure, protons within the nucleus experienced a gravitational attraction for each other since gravity depends only upon mass, is experienced only as an attraction, and is unaffected by electric charge. Unfortunately, however, the gravitational field is almost unimaginably weak; much less than a trillion-trillion-trillionth as strong as the electromagnetic field (see FIRST AND REARMOST, F & SF, October 1964).

If the matter in a hundred billion galaxies (roughly all the matter in the known universe) could be squeezed into a volume no larger than the Earth, then the gravitational attraction of that mighty concentration of mass for a proton on its surface would equal the electromagnetic repulsion produced by a second proton in contact with the first.

But nothing less than a hundred billion galaxies crammed into an Earth-sized globe will do, and such objects are not be to found readily.

Something else is needed; some new type of force-field altogether. This would give us a "nuclear force" and if this is to hold nuclei together and make matter (other than hydrogen) possible, it must have certain properties. In the first place, it must be even stronger than the electromagnetic field, at least at close quarters, for it must produce an attraction between protons stronger than the electromagnetic repulsion between them.

Another point—Both electromagnetic and gravitational forces are long-range. To be sure, they both weaken with distance, but only as the square of that distance. As a result, gravitational and electromagnetic forces can make themselves felt across vast gaps of space.

The hypothetical nuclear force can do no such thing. Within the infra-tiny nucleus it is overpoweringly intense, but it drops off very rapidly with distance; as a high-power of that distance, not just the square. At a distance greater than a ten-trillionth of a centimeter (at greater widths than the diameter of an atomic nucleus, for instance) it becomes weaker than the electromagnetic force, and if the distance increases to two or three ten-trillionths of a centimeter it becomes indetectable.

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Thus we can explain the fact that protons are strongly attracted at sub-nuclear distances, but show no signs of attraction if they are anything but cheek-by-jowl.

But we can't just invent a nuclear force of peculiar properties out of thin air. There's something about clear-cut observational evidence which is terribly desirable. To find some, let's go by way of the uncertainty principle. (See, I got there.)

In 1930, at a gathering of physicists at Brussels, Albert Einstein endeavored to show a fallacy in the reasoning that lay behind the uncertainty principle, then three years old. This principle held (as I explained in THE CERTAINTY OF UNCERTAINTY) that the inherent uncertainty in the determination of position multiplied by the inherent uncertainty in the determination of momentum was equal to not less than about one-sixth of Planck's constant:

$$(\triangle p)(\triangle mv) = 10^{-27} \qquad \text{(Equation 1)}$$

Einstein showed that if this were so then it was possible to maintain that the same relationship would hold for the product of the inherent uncertainty in the determination of energy content ($\triangle e$) and the inherent uncertainty in the determination of time ($\triangle t$) so that:

$$(\triangle e)(\triangle t) = 10^{-27}) \qquad \text{(Equation 2)}$$

He then went on to describe a thought experiment in which both energy and time could be measured simultaneously with unlimited exactness, assuming one had perfect measuring tools. If Einstein were right, the uncertainty principle was out the window.

The Danish physicist, Niels Bohr, stayed awake that night, and the next day, haggard but triumphant, pointed out a few flaws in Einstein's reasoning and showed that in the thought experiment under discussion, the determination of time would upset the determination of energy and vice versa. Einstein had to admit, reluctantly, that Bohr was right. The uncertainty principle has not been seriously challenged since.

Nevertheless, Einstein's version of the uncertainty principle, in which energy and time are linked, is perfectly correct and it introduces some interesting effects.

Using Einstein's version, imagine that you are measuring the energy content of some system at some instant of time. If your measurement pinpoints the energy content at some mathematical instant of time—over a duration of exactly zero seconds—you can't really measure the energy at all. The uncertainty of energy measurement is then infinite.

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If you are content to say that the energy of the system is thus and so over a certain period of time, then you are better off. The longer the period of time, the more exactly you can measure the energy content. Over a period of a ten-trillionth of a second or so, you could, ideally, measure the energy content of a system to a ten-trillionth of an erg or so. Under ordinary conditions, no one would want better than that.

Nevertheless, such a situation introduces a certain limited flexibility into the most importanant generalization known to science: the law of conservation of energy.

The law states that the energy content of a closed system must remain constant. Energy cannot appear out of nowhere and it cannot disappear into nowhere. However, if you measure the energy content of an atomic nucleus, let us say, over a period of a ten-trillionth of a second, you have determined that energy content, at best, only within a ten-trillionth of an erg. During that ten-trillionth of a second, the energy content can move freely up and down within that limit of a ten-trillionth of an erg, despite the law of conservation of energy. There would be no way of measuring that energy variation and therefore no way of accusing the nucleus of having broken the law.

You may say, of course, that it doesn't matter whether we can detect the violation of the law or not; that the law cannot be violated under any circumstances.

But is that so? Let's take an analogy.

Suppose a schoolboy is strictly forbidden to show any impoliteness to his stern teacher at any time under pain of severe flogging. Suppose further that whenever the teacher turns his back, the boy sticks out his tongue, but manages to get it in again before the teacher turns toward him. As nearly as the teacher can tell, the boy is being perfectly polite at all times, and is not breaking the rule.

In other words, a rule which ordinarily can't be broken, can be broken if it is done so over a short enough period. We can make this plain if we reword the rule to make it conform not to an impossible idealism, but to the situation as it truly exists. The rule is not: "A schoolboy must never be impolite to his teacher!" The rule, very obviously, is: "A schoolboy must never be caught being impolite to his teacher." All human rules are of that form. Even a murderer goes unpunished if the existence of the murder goes unsuspected.

Analogously, we must not define the law of conservation of energy as: "The total energy of a system remains constant at all times" but only as: "The total energy of a system remains measurably constant at all times."

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What we cannot measure, we cannot expect to insist on controlling by fiat, and the uncertainty principle tells us what we cannot measure. Energy is permitted to vary by a certain fixed amount, and the shorter the time interval over which this variation takes place, the greater the amount of variation permitted.

How does this apply to the nuclear field?

Again we return to Heisenberg. When he suggested the proton-neutron structure of the nucleus he saw very well the difficulty that arose in connection with protonic repulsion. He suggested that force-fields exerted their influences of attraction and repulsion by the exchange of particles between one body and another. In the case of the electromagnetic field, the particle exchanged was the photon (the unit of radiant energy); and in the case of the gravitational field, the particle exchanged was the graviton (a particle which remains as yet hypothetical for it has never been detected).

If there is to be a third force-field, a nuclear one, there must be a third exchange particle.

The Japanese physicist, Hideki Yukawa, got to work on the properties of this hypothetical nuclear exchange particle.

This exchange particle existed by virtue of the loophole offered by the uncertainty principle. It contained energy, but only the amount permitted by that principle. The shorter the time during which the nuclear exchange particle existed, the more energy it might have, so it was necessary to fix the duration of its existence somehow.

The exchange particle had to exist long enough to get from one proton to its neighbor within the nucleus and back or it would not exist long enough to set up an attractive force between protons. It could not exist much longer than that because then it would last long enough to get outside the nucleus and make the nuclear force felt there—in regions where the nuclear force was never felt. Thus the time of duration, and therefore the particle's energy content, could be determined within rather fine limits.

Suppose the exchange particle travelled at the velocity of light. It could then cover the distance from one proton to a neighboring proton and back in about 0.00000000000000000000005, or 5×10^{-24} seconds.

If an energy measurement is made over a time interval not less than 5×10^{-24} seconds, the additional energy made available for the briefly-existing exchange particle, by the flexibility introduced into the law of conservation of energy by the uncertainty principle, can be determined.

Turning to Einstein's version of the uncertainty principle, the un-

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certainty in time ($\triangle t$) is set equal to 5×10^{-24} and Equation 2 becomes:

$$(\triangle e)(5 \times 10^{-24}) = 10^{-27} \qquad \text{(Equation 3)}$$

Solving for $\triangle e$, we find that it equals 0.0002 ergs. This is the amount of energy that the uncertainty principle makes available for the exchange particle of the nuclear field. It is a tremendous amount of energy for a single particle and it would be difficult to handle as pure energy. It would be more convenient if the energy were, for the most part, packed into the form of mass—which is the most condensed form of energy known. An amount of energy equal to 0.0002 ergs can be packed into a particle with a mass about 250 times that of an electron, with enough left over to give it a velocity nearly that of light.

Yukawa, when he published his theory in 1935, suggested therefore that the nuclear exchange particle have mass (unlike the massless photon and graviton) and that the mass be intermediate between that of the electron on one hand and the proton and neutron on the other. (The proton and neutron are roughly 1840 times as massive as the electron and, therefore, something over 7 times as massive as Yukawa's exchange particle.)

Suggesting a nuclear exchange particle of specific properties, is one thing, but some observational evidence was still necessary. Inside the nucleus, the exchange particle comes and goes within the time limit set by the uncertainty principle. This means it cannot be observed under any circumstances. It is a "virtual particle", not a real one.

But suppose energy is added to the nucleus; enough energy to supply the amount required for the exchange particle without having to resort to the flexibility of the uncertainty principle. In that case, might not the exchange particle assume a real existence and condescend to hang around long enough to allow itself to be detected?

The catch was that packing the necessary energy into the small confines of the nucleus isn't easy. In the 1930's, the only possible source of sufficiently concentrated energy were the cosmic rays. In 1936, the American physicist, Carl David Anderson, in the course of his cosmic ray studies, found that cosmic rays were indeed occasionally knocking particles out of the nucleus that resembled Yukawa's exchange particle in mass. That mass turned out to be 207 times that of an electron.

Anderson called the particle a "mesotron" from the Greek word "meso" meaning "intermediate", but this was quickly abbreviated to "meson."

Unfortunately, Anderson's meson did not have the properties ex-

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pected of Yukawa's exchange particle. For one thing, Yukawa's exchange particle had to interact strongly with atomic nuclei, but Anderson's meson did not do so. It virtually ignored the existence of nuclei. The disappointment among physicists was keen.

Then, in 1948, a group of English physicists, headed by Cecil Frank Powell, who were studying cosmic rays in the Bolivian Andes, detected another particle of intermediate mass. The new particle was about 270 times as massive as the electron (about a third more massive than Anderson's particle), and it interacted with nuclei with a most gratifying avidity.

The new particle was also called a meson and it was distinguished from the meson earlier discovered by means of Greek letter prefixes. Anderson's meson was "mu-meson", soon shortened to "muon"; while Powell's meson was a "pi-meson", soon shortened to "pion." It is the pion that is Yukawa's exchange particle.

It is the pion whose existence within the nucleus makes possible the development of a nuclear force of attraction between neighboring protons over a hundred times as intense as the electromagnetic force of repulsion between them. It is the pion therefore that makes the existence of matter, other than hydrogen, possible. And the existence of the pion is itself made possible (behind the teacher's back, so to speak) by the uncertainty principle.

—So be careful how you yearn for certainty.

And what about the muon? If that is not the exchange particle, what is it? That, as it happens, is an interesting question, for in recent years the muon has raised two problems that are possibly the most fascinating that currently face the nuclear physicist. It is not even a meson, really. It is, instead—

But my space, alas, is used up.—Another time?

Oh, nuts, I did it again!

Watch for our OCTOBER ALL-STAR ISSUE

Featured is the first of a two-part novel by one of SF's most talented young writers, **ROGER ZELAZNY.** We doubt that you have ever read anything quite like AND CALL ME CONRAD. Its action is stunning, its characters vital, and its scene . . . its scene is Earth—but a vividly and terribly different Earth.

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The "new life" or "second chance" theme is a favorite of all of us when we are actively involved in that burdensome search for happiness, dignity, contentment, call it what you will. For most of us, rejuvenation comes rarely and in small chunks. But the Exchange gave Harry Eddington the Solution with one simple, clear cut business deal. For only seven million dollars, the Exchange would guarantee a life of poverty and . . .

A STICK FOR HARRY EDDINGTON

by Chad Oliver

THE GIANT PHOTOGRAPHS SET into the panels of the office walls were striking anachronisms: an Eskimo crouching on blue ice, a harpoon ready in his right hand, staring intently at a bone splinter stuck into the thin partition of a seal's breathing hole; an African man, his teeth filed down to sharp points and the lobes of his ears distended, leaning on a staff in the butter-yellow sunlight and gazing at a herd of skinny, hump-backed cattle; a Polynesian, his golden body drenched with spray, guiding an outrigger canoe through white surf that foamed like liquid cotton under a twilight sky. . . .

Harry Eddington jerked his attention away from the pictures. "Say that again," he demanded.

The man behind the polished desk, whose name was Richard Mavor, smiled and interlaced his well-manicured fingers. "About the financial arrangements?"

"About the price, yes," Harry said.

"The Exchange does not dicker. Our contract is a standard one, as I told you. For clients whose net worth is over one million dollars—and we don't accept any other kind of clients, Mr. Eddington—the client is allowed to retain one-third of his wealth. This is to enable him to provide for his wife, his children, his charities, and whatnot. The rest is signed over to the Exchange. In return, the Exchange guarantees to place the client in the form, location, and

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situation that has been mutually agreed upon. There can be no refunds, of course, because what we are offering you is by necessity a one-way ticket. We can put you where you wish to go, but you will then be a pauper by our standards; we can't bring you back again at our own expense. That's simple enough, isn't it?"

Harry Eddington ignored the advice of his doctor and lit a cigarette. "Very simple. I give you about seven million bucks. You give me a life of poverty. Is that it?"

"Give or take a few hundred thousand dollars," Richard Mavor said agreeably. "We will insist on a thorough audit, of course."

"Isn't that a little steep?"

Mavor chuckled. "You can't take it with you, Mr. Eddington. Either way. If you live out your life in your present circumstances, what is left after taxes will do you no good in your coffin. If you choose to accept our services, we have to insist on a clean break. This is for your own welfare, believe me. If the transfer is incomplete and tentative, you would be nothing but a rather peculiar tourist. Besides, it's illegal to set aside a kind of emergency fund in case you change your mind."

"You can't take it with you, either, but *you* want it."

Mavor managed to achieve a hurt expression. "I only work here, as I'm sure you understand. I don't get the money."

"You get a commission, don't you?"

"Well, yes."

"I wasn't born yesterday," Harry said.

"In that case," said Richard Mavor, who had no intention whatever of letting this particular fish get off the hook, "you will certainly appreciate that our positions are different. You are—or were—a businessman, Mr. Eddington. You don't expect to get something for nothing. The service we provide is highly specialized; it costs money. You came to us. We did not come to you."

"You sent me a letter," Harry said stubbornly.

"Come now. We do not advertise at random, but when we have reason to believe that a man is a potential client we offer him an opportunity. The fact that you came here is proof that you are interested."

"Okay, I'm interested. I don't expect to get something for nothing. On the other hand, I don't intend to get nothing for something. A whole hell of a lot of something. I worked hard to get where I am today."

Mavor smiled and moved in for the kill. "And where are you today, Mr. Eddington? That is the heart of the matter, it seems to me. You are fifty-one years old and you cannot work because of the retirement laws. You have no real interests apart from the business from which you are barred. Your children are

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married and you seldom see them. Your wife is younger than you are, and she has—ah—lost interest in you. A divorce would cost you a fortune, and your chances for happiness would be no better than they are now. You have made a great deal of money, I grant you that. If your money could buy you what you want—call it happiness, dignity, contentment, whatever you please—then you would be a fool to sign it over to us. If, however, your money is useless to you in your present circumstances, why try to hang onto it? You recall the story of the Spanish at Tenochtitlan, of course?"

"Can't say that I do," Harry said, thinking that the man across the desk knew entirely too much about him.

"Well, in brief, when Cortes was sacking the Aztec city, some of his men got themselves so loaded down with treasure that they were at a distinct disadvantage when the going got rough. In fact, when they had to swim for it across the canals, they sank like stones. You follow me?"

"I get the picture."

"I'm sure you do, Mr. Eddington. Now, let's put our cards on the table. There is really just one thing for you to decide. How much is your happiness worth to you? The choice is yours—your money gives you that choice. We don't expect you to decide today. We *would* like for you to take some of our literature home with you—here, these four spools will do for a starter. Check them out and make up your own mind. If you feel that our offer is a good one for you, come back with your lawyer. I'll be glad to answer any of your questions at any time, of course."

Harry hesitated. "Just one question for now. This is a true exchange, right? If I go, someone will —ummm—take my place?"

Richard Mavor smiled his ready smile. "Nature abhors a vacuum, Mr. Eddington."

"Meaning?"

"Well, Mrs. Eddington will not be left alone, I can assure you of that."

Harry grinned. "That has possibilities, doesn't it?"

Richard Mavor looked at him sharply. "Our experience has been that it works out very satisfactorily for all parties concerned."

Harry stood up and pocketed the spools. "I'll be in touch."

Richard Mavor extended his smooth hand. "We'll be expecting you, Mr. Eddington."

Harry Eddington woke up early the next morning, as always. All his life he had gotten up at dawn and had been in his office before eight. Now that there was no need for him to get up, he could not cultivate the habit of sleeping late.

He faced the day with a total lack of enthusiasm. He glanced at the door of Emily's bedroom. It was

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closed and probably locked. He didn't try it. He killed an hour in the bathroom, dressed with elaborate and pointless care, and went downstairs.

The great house seemed empty, and for an excellent reason: it *was* empty. He rattled around in it like a marble in a mahogany barrel.

He sat down alone at the dining table and jabbed the breakfast buttons. In eighty seconds—no more, no less—the serving cart rolled in from the kitchen with two poached eggs, four pieces of bacon, toast, and coffee. It all tasted like sawdust except for the coffee. The coffee tasted like dishwater.

Harry got up and wandered through the deserted house. He had the whole day ahead of him and absolutely nothing to do. He had eaten breakfast. The next big item on the agenda would be lunch. Then would come the interminable wait until dinner. After that, God alone knew.

He went into the TV room and stared at the blank gray screen that covered one wall. He decided that he wasn't desperate enough yet for daytime television. He sat down and picked up the morning paper. It was a printed one; Harry was something of a traditionalist. He was not eager to read it, but a man had to do something.

He checked the financial pages with a practiced eye and found that he had made about five thousand dollars while he slept. He glanced at the comics. Orphan Annie was the only one that had survived from his youth, and he was mildly reassured to find that she had developed neither eyeballs nor progressive political attitudes. He tried to get through the sports section to see how the Cards were doing. Not bad, but they still weren't about to catch the General Dynamics Giants. The G.D. Giants, as they were known in the trade, had just enticed too many good ball players with fancy stock deals.

There was nothing much in the news. The Mars Colony, staffed entirely by men and women under twenty, announced that it would be self-sustaining next year. Harry had heard that one before. The President, who was a mature old gentleman of twenty-five, had made a speech vowing to end conflict of interest contracts in the development of the Antarctic. The appearance of the Field Mice, a quartet of nine-year-old folk singers, had caused a near riot in New York. Critics had praised the group's "purity of line" and "intuitive understanding" of such hallowed ballads as *Pistol Packin' Mama* and *Three Little Fishes*. Harry hadn't much cared for the songs the first time around. Scientists at the National Institute stated that human gills for undersea living could now be obtained at reasonable cost, and held out the distinct hope that there could now be "increased social interaction"

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between interested citizens and sperm whales. Harry wasn't interested.

He read the ads with a feeling somewhere between disgust and despair. Harry had nothing against advertising—quite the contrary—but the *tone* of the ads annoyed him. All of the models in the photographs were either bright-eyed children or impossibly virile men and women in their teens. Old people simply didn't exist. The prize ad showed two women in seductive nightgowns stretched out side by side on a bed with silken sheets. WHICH GIRL IS THE GREAT GRANDMOTHER? asked the caption. ONLY THE FAMILY DOCTOR KNOWS FOR SURE! Bully for him, Harry thought. He read on. It seemed that regular injections of beeswax, Lunar dust, and apricot juice would keep a woman perpetually young and "active," apparently right up to the time when she conked out from old age in the midst of an orgy.

"Damnation," he said, and lit a cigarette.

It had been different in the old days, Harry knew that. His father had not been any senior citizen at fifty-one. He hadn't been this much out of things as an invalid of eighty.

Still, if you were thinking about the good old days, you had to go back to Grandfather Eddington. Harry's kids called him Harry when they bothered to speak to him at all. Harry had called his father Dad or Pop. Harry's father had called *his* father just that: Father. And he had usually added that obsolete word, *sir*.

Harry remembered Grandfather Eddington, remembered him vividly. He remembered him from those long-ago Sunday dinners in the big white house when he was a child, and he remembered him from the stories his father had told him. Grandfather Eddington had been an awesome figure of a man. He had ruled his household like a king.

Harry could see him now, striding down the sidewalk on a Sunday afternoon, going to the park to feed the birds. He always dressed in white; he looked like a military snowman with his shock of white hair and his bushy white eyebrows. He carried a walking stick, a carved staff of ornate polished wood, and he twirled it as he walked. Family legend had it that Grandfather had cracked a skull or two with that stick when people had not gotten out of his way fast enough to suit him.

When Harry had been very small, dressed in his hated Sunday suit of blue coat and knickers, he had been allowed to tag along behind Grandfather on those walks to the park. He had admired that walking stick more than anything else on earth. One day, he had promised himself, he would have a stick like that. He would be *somebody*.

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It hadn't quite worked out that way.

Harry had no walking stick, and people would have considered him balmy if he had bought one. Nobody walked anywhere these days. His authority in the family approximated absolute zero. As for being a wise old man whose advice was sought by all, that was a very large laugh. Nobody gave a hoot in hell what he thought about anything. The Field Mice? He still thought that Benny Goodman had been pretty hot stuff. The Mars Colony? He didn't know an asteroid from a hole in the ground, and didn't care. Baseball? He remembered Musial and Williams and Ol' Diz—what could he possibly say about a Yankee first baseman who was fifteen years old? Sure, he knew that players came along much faster with all the organized pre-school training they got now, but after all. . . .

Face it. He was *out* of it, and that was that.

He leaned back in his reclining chair. The massage started. He lapsed into daydream. He was doing that a lot lately—not quite asleep, not quite awake. . . .

Harry was walking briskly down the sidewalk, his white suit shining in the sun. His stick felt good and solid in his right hand, and he twirled it expertly as he strode along. "Good afternoon, sir," a man said, touching his cap. Harry nodded indifferently; he had a decision to make. Now, about the new park that had been proposed. They could clear that shoddy area between Main and Fulmore, run a little rustic bridge over Clear Creek, put in some nice fat goldfish—

"Harry!"

He looked up with a start. Not a goldfish, alas. Emily had arisen.

"Harry, you're spilling ashes all over the rug."

"Oh. Sorry, dear."

"I'm going out," Emily announced.

He looked at her. She wasn't hard to look at by any means. Her clear skin was unlined, her blonde hair soft but expertly waved, her figure young and appealing under her clinging green dress.

"Going to see the swami?" Harry asked.

"He's not a swami, and you know it. He's a certified Interpreter of Mysticism, and he's a *very* fine man."

Emily had been going in for assorted cults of late, which really wasn't like her at all. The cults all seemed to advocate abstinence from what they persisted in referring to as pleasures of the flesh, or so Emily said. That certainly wasn't like Emily either, and Harry had his doubts.

"Give the swami my regards," he said.

"I'll do that." Her voice was cool and unconcerned. "And try not to drink too much this afternoon,

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Harry. We're going out tonight."

"Out?"

"To the club. We're playing Bingo."

Oh *boy,* thought Harry.

Emily swished out, her hips swinging engagingly.

Damn it, Harry thought, she does that on purpose. He had been forced to try other women from time to time—a couple of years of abstinence could be a very long time indeed, and Harry wasn't all that old—but they hadn't worked out very well. Basically, Harry was a decidedly conservative man.

He went in and ate lunch by himself, as usual.

He returned to his chair, dialed himself a bourbon and water, and took out the spools that Richard Mavor had given him.

Harry Eddington had just about made up his mind.

Still, he wasn't a man who liked to rush into things.

He didn't entirely trust Mr. Richard Mavor.

He intended to be very sure that he knew what he was doing before he put his John Henry on any contract.

The spools, as he had feared, were rather heavy going.

"You'd think," he said aloud, "that with all the money they make they could afford some decent writers."

He stuck with them. The projections, he found, were oddly convincing despite their murky language. Harry could spot a phony pitch a mile away, and the spools struck him as being on the level. The problem was in trying to decipher what it was that they were saying.

The first one was wittily entitled, *The Sociocultural Concomitants of Status and Role Transformation.*

Translated into a rough approximation of English, it said that every social system was marked off into a series of positions—statuses—and that for every status there was a role, the latter being the part that a person was supposed to play when he occupied a particular status. So far, so good. It seemed that status was determined in a variety of ways, depending on the culture of the group in question, but that much the same ingredients were used elsewhere in calculating status: age, sex, birth, property, personality characteristics, and so on. However, the *value* assigned to the various factors changed from society to society. Some systems gave high status to the old, some to the young; in some cultures it was great to be a man, in others it was better to be a woman. Harry began to get a headache. In addition, certain *kinds* of persons were more highly valued in one system than in another. A warrior was a big man among the Plains Indians, but if you were a Hopi you were supposed to be peaceful. There were rather

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too many examples along the same lines; Harry got the general idea without undue difficulty. It seemed that the role that went along with the status also varied at different times and places. The basic point was simple enough: the problem of individual happiness and contentment was largely a matter of being the right sort of person in the right place at the right time. In effect, Harry figured, the business of the Exchange was to match a given person with the culture that happened to value what that particular person had to offer.

He followed it all the way through. Then he dialed another drink and tackled the second spool.

It, too, had a racy title: *A Thematic Analysis of the American Culture Pattern.*

"Oh, brother," Harry said.

The idea this time hit close enough to home to be moderately interesting. The spool stated that the American culture in 1995 was classified as a dynamic, driven system; it was the precise opposite of a stable, passive culture type. The system retained a number of fundamental ideas that had characterized it for many years: an emphasis on very rapid technological and social change, a focus on youth, an isolation of the individual as a kind of social atom. "That's me," Harry said. The ideal in the old American culture, the spool projected, was the man of action, the go-getter, the practical man who got things done. Nowadays, the legacy of this notion still survived. The elderly—legally defined as those past fifty years of age—were in a tough spot because they were thought of as obsolete. They didn't have much to offer in the way of traditional wisdom because the culture had literally passed them by: the culture changed so fast that the culture in which they were expert no longer existed. If they had money, they could function as consumers. "Don't I know it," Harry said. Beyond that, they could only try to "think young" and masquerade as pot-bellied teen-agers. The passing of the frontier had put more economic power in the hands of women. The role of the male was becoming ambiguous. . . .

Harry felt worse than ambiguous. His headache was assuming classic proportions. He scanned the last two spools with something less than complete dedication.

One was called *The Legal and Ethical Aspects of Ego Exchange,* and it was primarily a summary of a series of court decisions. The key point seemed to be that personality transfers were legal as long as both of the parties concerned had given their consent to the transaction. On the ethical side, the U.N., after a long procedural wrangle, had given its blessing in the form of its *Manifesto Regarding the Rights of Individuals to Cultural Self-Determination,* which sounded reasonably lofty.

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The final spool was *The Dynamic Mechanics of Personality Transfer,* which boasted a preface by the retired head of the American Medical Association. (A lengthy footnote said proudly that the good doctor was now a shaman on Tierra del Fuego.) The projection was a maze of circuit diagrams and obscure mathematical symbols, and it was all Greek to Harry.

Well, no matter.

Harry was ready for Mr. Mavor.

"We want to be completely satisfied," said Richard Mavor the next day.

"That makes two of us."

"I believe you said that you had some specific questions?"

"A few, yes. Let's suppose that I agree to make the switch. Does the Exchange guarantee my future happiness?"

Mavor pursed his lips. "That's a large order."

"It's your business, isn't it?"

Mavor leaned forward across the polished desk and chose his words with great care. "We can guarantee two things, certainly. First, we will put you—the essential you, so to speak—in a body that will—ah—harmonize with the new surroundings you choose. Second, we will place you in a functioning culture that will maximize the attributes you happen to possess."

Harry considered. "Okay, I'll buy that. Why can't you put me in a young body?"

Mavor looked shocked. "It doesn't work that way. We are not in the immortality business, Mr. Eddington. The transfer is only possible—mechanically and legally—between two persons of the same physiological age. We have a leeway of a week or two at best. If you had studied *The Dynamic Mechanics of Personality Transfer.* . . ."

"I'll take your word for it. Look, if this is such a good deal for me, how come the other guy is so willing to take my place?"

Mavor waved at the pictures on the walls. "People are funny, Mr. Eddington. One man's meat, you know."

"It can't be that simple."

"It is and it isn't. Look at it this way. What we have in the modern world is a situation in which most of the people—numerically speaking, if that isn't overly redundant—live in what amounts to the same basic culture, the urban, industrialized, technologically sophisticated culture that you and I grew up in. The rest of the people—small in total numbers, but rich in diversity—live in the remnants of primitive societies or in peasant enclaves. In your case, there is no point to shifting from one area to another within the same basic culture pattern. You have to go elsewhere, into the primitive world. Now, to most primitive peoples, romantic gush to the contrary, the chance to have a shot at this glit-

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tering outside world of ours is overwhelmingly attractive. Such a man, perhaps regrettably, doesn't think much in terms of subtle satisfactions and delicate personality adjustments. He hasn't got much of anything, by our standards, and he wants a car, a copter, a big house with a fancy bathroom, a TV, money, power. In short, he wants what you have got. You have to live as a poor, powerless man before you can appreciate the other side of the coin. And you have to live as a rich, lonely man to understand the rewards of other ways of living. Neither man can tell the other one anything, but we have found that both are eager and willing to make the exchange."

"It doesn't cost the other guy anything?"

"He hasn't any wealth, in our terms. It has to be paid for at this end."

Harry nodded slowly. He thought he would know a snow job when he heard one, and Mavor seemed to be giving him straight answers. "I thought these—uh—savages were dying out. What if there's no place to go? Suppose the culture fizzles out while I'm still alive?"

Richard Mavor, who wouldn't see forty again, was an experienced man. He had a lot at stake, and he had the answers to tougher questions than the ones that Harry Eddington was asking. "It's a funny thing, actually. You'd be surprised how many primitive cultures there are left, to say nothing of peasant societies. We always tend to think that the whole world is like ourselves; that's been true all through history. But God knows how many cultures there were on this planet that never even heard of the Roman Empire, say. Even now, there are quite a few cultures kicking around that are radically different from our own—in Africa, in India, in South America, in New Guinea and other places. Our job is to know where those cultures are and what they are like. We employ as many anthropologists as the ten leading universities in this country combined, and we spend a great deal of money to ensure that those cultures will survive for a reasonable length of time. But let's be frank about this, Mr. Eddington. If you're looking for a romantic, untouched island full of beautiful, happy people who are totally uncontaminated by any taint of contact with the outside world, you can forget it. It doesn't exist. All we have to offer are real people and real places. We have no convenient time machine at our disposal. We can't put you in Utopia. But you certainly wouldn't be happy in never-never land anyway, believe me. There have to be a few problems or there is no zest to living—and that's the whole idea, isn't it?"

Harry felt a growing sense of excitement. There might be a catch in it somewhere, but he couldn't

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see it. It was a little like heaven; nobody ever came back to give you a first-hand report. But what did he have to lose?

"Where could I go?" he asked. "What would it be like?"

Richard Mavor smiled with considerable relief. He knew exactly where Harry was going. He even had the agreement ready with the man Harry was scheduled to replace. The man's name was Wambua. Mavor was pleased for a number of reasons, not the least of which was that he felt a certain kinship with Harry. Of course, it wouldn't do to move *too* fast. He had to be careful.

"We'll have to run some tests, match you up with what we have available. We want you to be completely satisfied, as I told you. Until the contracts are signed, however—"

Harry stood up. "My lawyer is outside," he said firmly. "Let's get on with it."

Two weeks later, on Harry's last night as Harry Eddington, he took Emily to a movie. It was a very modern movie: it was filmed in jerky movements like a silent film, it was equipped with smell and sensations, and it had neither beginning nor ending. Harry didn't care; his mind was on tomorrow.

When they got home, both of them seemed preoccupied. Emily smiled at him, which was unusual. "Goodnight, Harry," she said, and went into her own room and locked the door.

"Goodbye, Emily," said Harry.

He was smiling too.

The African sun gave little warmth in April. It was the middle of the long rains in Kenya, and the hills of Ngelani were damp and chilly. Wambua wa Mathenge, who had once been a man named Harry Eddington, pulled his tattered gray blanket around his naked shoulders and shivered.

"I will have more beer," he said, extending his tin cup.

Ndambuki poured from the calabash without comment. Wambua's cup was clean, as usual, but then Wambua had been a little peculiar lately.

Wambua took a sip of beer and spat it on the ground for the *aimu*, the ancestors. The *aimu* were welcome to it, in Wambua's opinion; the beer, made from quickly fermented sugar cane juice, was a far cry from Budweiser.

He looked around. The fields, each one marked off by a hedge of sisal, stretched forlornly over the treeless hillsides. Even now the women were working with the crops, as was fitting. A group of boys walked along the valley trail, pushing a herd of skinny hump-backed cattle. Wambua smiled, showing his filed and pointed teeth. He liked to look at cows. Cows were wealth, and cows could pay the bride-price for his sons when

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Wambua was good and ready for them to marry.

A jet screamed through the sky, flashing over the huts of sun-dried brick and thatch, headed for Nairobi. Wambua's smile vanished. Those damned American tourists. . . .

"Wambua!" It was Kioko who spoke, Kioko of the splendid beard. "You are dreaming, *mutumia.* Have you forgotten that we have a case to decide when the council meets tomorrow?"

Wambua felt a small glow of pleasure. Kioko had called him *mutumia,* elder. He *was* an elder, of course, as were most men of his age among the Kamba. All of the men seated around the little fire and sharing beer from the calabash were elders, as was only proper. "I am giving the matter much thought. More beer, Ndambuki?"

Ndambuki, who was the junior elder present, poured again.

Wambua was thinking; that was true enough. But it was hard to concentrate. He was sure that a witch was after his cows. Two of them had gone lame in the past week alone. It was high time he went to the *mundu mue* and had the doctor cast his beads. Of course, he was not unmindful of his duty. His opinion had been sought in an important legal case. If the elders did not maintain law and order, who would?

He sipped his beer thoughtfully. "I will tell you this, Kioko," he said. "When you need nine men, Wathome is number ten."

The elders gathered around the calabash chuckled. That was a good proverb, very apt indeed.

"A frog cannot stop a cow from drinking," Wambua continued. "Moreover, a neighbor makes a smelling sheath."

Ndambuki slapped his thigh. Wambua might be acting a little strange, but he was no dumb Masai when it came to legal cases.

Wambua delivered his opinion on the case at some length. He was enjoying himself hugely. Let the women work the fields and haul the firewood on their backs, this was a job for a *man.* This took real skill.

"Never fight a war with your finger," he concluded solemnly.

The discussion went on all afternoon. The beer dwindled in the calabash until nothing was left but a sticky residue for the flies. The fire died down to an orange pile of hissing coals.

Wambua glanced up in time to see Muema, the first son of his first wife, walking down the trail toward him. Muema stopped at a respectful distance from the knot of elders. "Father," he said, "your food has been prepared, if you desire to eat it."

Wambua grunted. It was the duty of a son to assist his father when his father had been long at the beer calabash, but Wambua felt perfectly capable of navigating. Still, it would be pleasant to walk

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with his son. He stood up and checked his charms. The ball of lion hair and the small antelope horn were in their proper places, along with his cigarette lighter and package of filter-tips. Wambua had not yet adapted to snuff.

"Do you wish me to take your arm?" asked Muema.

"I can walk," Wambua assured him. The boy was being very careful with his manners. He had better be, Wambua thought. Otherwise, Wambua would not give him any cows, and that would be a disaster. No cows, no bride.

Wambua picked up his elder's staff. It was made of hard brown wood, smoothly polished from years of use. It was seven feet long and had a little fork at the top end. Only an elder could carry such a stick.

His son fell in behind him and Wambua started up the steep trail that led to his cluster of huts. He blinked his eyes against the gray drizzle. The huts would be warm and pleasantly smoky. He had not yet decided which wife he would favor tonight. A man should try to be fair. It was really Syomiti's turn. There was too much witchcraft around to take needless chances. On the other hand, Mbinya was young and appealing. . . .

He gripped his stick firmly and hummed a little tune.

Wambua did not regret the choice he had made, not for a moment.

He would not have changed places with anyone else in the world.

Emily Eddington stared out of the window of the TV room and frowned with annoyance. The damned cows were still there in her backyard, standing placidly in the moonlight. She could smell them right through the air conditioner.

What was worse, she could smell Harry too. Harry wasn't much of a one for taking baths.

Harry wasn't much of a one for anything, if it came to that. He spent his time staring at the TV or zooming through the city air in his copter. Emily had been expecting a bit of a thrill from being married to a man who was, after all, something of a savage. She had been disappointed, to say the least. Harry treated his cows with more consideration than he showed her.

Emily turned away from the window. She had on her most seductive negligee and her sexiest gown under it.

"I'm going to bed, Harry," she said softly.

Harry Eddington, who had once been a man named Wambua wa Mathenge, continued to gaze with rapt fascination at a western program on TV. There were *lots* of cows in the show. He did not bother to look up at Emily.

"I will inform you when you are wanted," Harry said.

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Emily went up the stairs, boiling mad.

Tomorrow, she was going to have a good long talk with dear old Richard.

"I can't stand it, do you hear?" Emily said.

"It won't be for long, dear," Richard Mavor said patiently. "You really shouldn't come here to the office. It's too dangerous."

Emily began to cry. "You don't love me any more," she said, crossing her admirable legs.

Mavor kissed her gently. "You know better than that, Emily. I don't like this waiting either. But we have to be careful. If the Exchange finds out about that kickback—"

"You said you could work everything out."

"I am working everything out. Be reasonable, darling. When you first came to me about Harry—the first Harry, that is—I told you that I could arrange it so that you would get part of that seven million back. You got it, didn't you? You are still a very wealthy woman, Emily."

"I don't care. I did it for you, Richard, you know that. And now here I am stuck with that—that cowboy—"

Mavor felt a warm glow. She *did* care for him, at least a little. He knew Emily's faults; he had no illusions about her. But he had fallen hard for Emily Eddington. He had wanted her from the first moment he had seen her, and he still wanted her. Their clandestine meetings were not enough, not nearly enough. . . .

Mavor put on his most convincing manner, which could be quite convincing indeed when he set his mind to it. And he set his mind to it without reservation: his whole future depended on it. "We can't stretch the law too far, darling. We have to wait until Harry—the second Harry, that is—gets tired of his new toys and starts thinking. It will take a few years, that's all. Then, when you've made him thoroughly miserable, we can plant that ad about the cattle ranch where he'll be sure to see it. I've explained all this before, sugar; we both agreed to the plan, and we have to stick with it. Harry Number Two is not Harry Number One, not quite. He won't put up with a difficult wife, and he won't be tempted by any primitive society—he's been there. Harry Number Two will take the divorce route, which will be just fine. He'll have his cattle ranch, you'll *still* have plenty of money, and we can get married."

Emily dried her eyes. "Oh, I know—you're right, dear—but I hate this waiting. . . .

"So do I. But it's the only way. Our time will come."

"Kiss me again, Richard. Really kiss me."

Mavor did so. It was quite a kiss.

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"I'll go now," she said, her spirits much restored. "Same time and place as usual?"

"I'll be there."

"Don't forget about me, Richard."

"Not a chance," he assured her.

He showed her out, his heart pounding.

Richard Mavor sat behind his polished desk and smiled with pardonable pride. He figured that by any reasonable standard he had done pretty well for a mere wage-earner faced with retirement.

"Everybody wins," he said aloud.

Harry Number One, he was sure, was a happier man today. He knew all about Harry Number One; they were a lot alike in many ways, even down to such details as having fallen for the same woman. Harry Number Two was having a good time, and would enjoy himself even more with his cattle ranch. And Emily—

Well, Emily Eddington was probably as happy as she could ever be. She was a restless woman, she would always move from one man to another, but she was basically satisfied in a culture that completely suited her.

Richard Mavor wanted his woman to be happy. He was going to marry her as soon as it could be arranged, and he was going to do his best to make the marriage a good one. But he did not delude himself. Emily had not been content with Harry Number One, she was not content with Harry Number Two, and she would not be content with Richard Mavor when she got him.

Well, that was the way it was. A man had to be practical.

At the very least, he would have Emily to himself for a few years. He would have a taste of luxury while it lasted.

And when she tired of him, or he of her—

He smiled. There was a remedy available. He was an expert in that particular field.

He looked up at his favorite picture. The African man in the butter-yellow sunlight was still leaning on his staff, gazing out at the herd of thin, hump-backed cattle.

"Save a stick for me, Harry," Richard Mavor said quietly.

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It's an unusual mission indeed which requires a specialist in both geriatrics and gunnery. The mission: to penetrate 150 light years into hostile space, to track down and bring home one ship which has survived a 2-century-old battle and which, incredibly, is piloted by a 200-year-old, living human being.

THE IMMORTAL

by Gordon R. Dickson

THE PHONE WAS RINGING. HE came up out of a sleep as dark as death, fumbled at the glowing button in the phone's base with numb fingers and punched it. The ringing ceased.

"Wander here," he mumbled.

"Major, this is Assignment. Lieutenant Van Lee. Scramble, sir."

"Right," he muttered.

"You're to show in Operations Room four-oh-nine at four hundred hours. Bring your personals."

"Right." Groggily he rolled over on his stomach and squinted at his watch in the glow from the button on the phone. In the pale light, the hands of his watch stood at twelve minutes after three—three hundred ten hours. Enough time.

"Understood, sir?"

"Understood, Lieutenant," he said.

"Very good, sir. Out." The phone went dead. For a moment the desire for sleep sucked at Jim Wander like some great black bog, then with a convulsive jerk he threw it and the covers off him in one motion and sat up on the edge of his bed in the darkness, scrubbing at his face with an awkward hand.

After a moment, he turned the light on, got up, showered and dressed. As he shaved, he watched his face in the mirror. It was still made up of the same roughly handsome, large-boned features he remembered, but the lines about the mouth and between the eyebrows seemed deepened with the sleep, under the tousled black hair, coarsely curling up from his forehead. It could not be drink, he thought. He never drank even on rest-alert nowdays. Alcohol did nothing for him any more. It was

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just that nowdays he slept like a log—like a log watersoaked and drowning in some bottomless lake.

When he was finally dressed, he strapped on last of all his 'personals'—his sidearm, the x-morphine kit, the little green thumbnail-square box holdng the cyanide capsules. Then he left his room, went down the long sleeping corridor of the officers' quarters and out a side door into the darkness of predawn and the rain.

He could have gone around by the interior corridors to the Operations building, but it was a short-cut across the quadrangle and the rain and chill would wake him, drive the last longing for sleep from his bones. As he stepped out of the door the invisible rain, driven by a light wind, hit him in the face. Beyond were the blurred lights of the Operations building across the quadrangle.

Far off to his left thunder rolled. Tinny thunder—the kind heard at high altitudes, in the mountains. Beyond the rain and darkness were the Rockies. Above the Rockies the clouds. And beyond the clouds, space, stretching beyond the Pole Star to the Frontier.

Where he would doubtless be before the dawn rose, above this quadrangle, above these buildings, these mountains, and this Earth.

He entered the Operations building, showed his identification to the Officer of the Day, and took the lift tube up to the fourth floor. The frosted pane of the door to room four-oh-nine glowed with a brisk, interior light. He knocked on the door and went in without waiting for an answer.

Behind the desk inside sat General Mollen, and in a chair half-facing the General was a civilian of Jim's own age, lean and high-foreheaded, with the fresh skin and clear eyes of someone who has spent most of his years inside walls, sheltered from the weather. Both men looked up as Jim came in and Jim found himself twinged by a sudden and reasonless dislike for the civilian. Perhaps, he thought, it was because the other looked so wide awake and businesslike this unnatural hour of the morning. Of course, so did General Mollen, but that was different.

As Jim came forward, both of the other men stood up.

"Jim," said the General, deep-voiced, his square face unsmiling. "I want you to meet Walt Trey. He's from the Geriatrics Bureau."

He would be, thought Jim grimly, shaking hands with the other. Walt Trey was as tall as Jim himself, if leaner boned. And his handsake was not weak. But still . . . here he was, thought Jim, a man as young as Jim himself, full of the juices of living and with all his attention focussed on the grey and tottering end years of life. A bodysnatcher—a snatcher of old

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bodies back from the brink of the grave for a few months or a few years.

"Pleased to meet you, Walt," he said, in a neutral tone.

"Good to meet you, Jim."

"Sit down," said the General. Jim pulled up a chair and they all sat down once more around the desk.

"What's up, sir?" asked Jim.

"Something special," answered Mollen. "That's why Walt here's been rung in on it. Do you happen to remember about the Sixty Ships Battle?"

"It was right after we found we had a frontier in common with the Laggi, wasn't it?" said Jim, slightly puzzled. "Two hundred years ago or so. Back before we and they found out logistics made space wars unworkable. Sixty of our ships met forty-some of theirs beyond the Pole Star and their ships were better. What about it?"

"Do you remember how the battle came out?" It was the civilian, Walt Trey, leaning forward with strange intensity.

Jim shrugged.

"Our ships were slower then. We hadn't started to design them for guarding a frontier, instead of fighting pitched battles. They cut us up and suckered what was left into standing still while they set off a nova explosion," he said. He looked into the civilian's eyes and spoke deliberately. "The ships on the edge of the explosion were burst up like paper cutouts. The ones in the center—well, they just disappeared."

"Disappeared," said Walt Trey. He did not seem disturbed by Jim's vivid description of the nova and death. "That's the right word. Do you remember how long ago this was?"

"Nearly two hundred years ago," said Jim. He turned and looked impatiently at General Mollen, with a glance that said plaintly—*what is this?*

"Look here, Jim," said the General. "We've got something to show you." He pushed aside the few papers on the surface of the desk in front of him and touched some studs on the edge of the desk. The overhead lights dimmed. The surface of the table became transparent and gave way to a scene of stars. To the three men seated around the desktop it was as if they looked down and out into an area of space a thousand light years across. To the civilian, Jim was thinking, the stars would be only a maze. To Jim himself, the image was long familiar.

Mollen's hands did things with the studs. Two hazy spheroids of dim light, each about six hundred light years in diameter along its longest axis, sprang into view—bright enough to establish their position and volume, not so bright as to hide the stars they enclosed. The center of one of the spheroids was the sun of Earth, and the

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furthest extent of this spheroid in one direction intermixed with an edge of the other spheroid beyond the Pole Star, Polaris.

"Our area of space," said Mollen's voice, out of the dimness around the table—"and the Laggi's, Walt. They block our expansion in that direction, and we block theirs in this. The distribution of the stars in this view being what it is, it's not practical for either race to go around the other. You see the frontier area?"

"Where the two come together, yes," said the voice of Walt.

"Now Jim—" said Mollen. "Jim commands a wing of our frontier guard ships, and he knows that area well. But nothing but unmanned drones of ours have ever gotten deep into Laggi territory beyond the Frontier and come back out again. Agreed, Jim?"

"Agreed, sir," said Jim. "More than ten, fifteen light years deep is suicide."

"Well, perhaps," said Mollen. "But let me go on. The Sixty Ships Battle was fought a hundred and ninety-two years ago—here." A bright point of light sprang into existence in the Frontier area. "One of the ships engaged in it was a one man-vessel with semi-animate automatic control system, named by its pilot *La Chasse Gallerie*—you said something, Jim?

The exclamation had emerged from Jim's lips involuntarily. And at the same time, foolishly, a slight shiver had run down his back. It had been years since he had run across the old tale as a boy.

"It's a French-Canadian ghost legend, sir," he said. "The legend was that voyageurs who had left their homes in Eastern Canada to go out on the fur trade routes and who had died out there would be able to come back home one night of the year. New Year's night. They'd come sailing in through the storms and snow in ghost canoes, to join the people back home and kiss the girls they now wouldn't ever be seeing again. —That's what they called the story, La Chasse Gallerie. It means the hunting of a type of butterfly that invades beehives to steal the honey."

"The pilot of this ship was a French-Canadian," said Mollen. "Raoul Penard." He coughed dryly. "He was greatly attached to his home. *La Chasse Gallerie* was one of the ships near the center of the nova explosion, one of the ones that disappeared. At that time we didn't realize that the nova explosion was merely a destructive application of the principle used in trans-light drive. —You've heard of the statistical chance that a ship caught just right by a nova explosion could be transported instead of destroyed, Jim?"

"I'd hate to count on it, sir," said Jim. "Anyway, what's the difference? Modern ships can't be anticipated or held still long enough

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for any kind of explosion to be effective. Neither the Laggi nor we have used the nova for eighty years."

"True enough," said Mollen. "But we aren't talking about modern ships. Look at the desk schema, Jim. Forty-three hours ago, one of our deep unmanned probes returned from far into Laggi territory with pictures of a ship. Look."

Jim heard a stud click. The stars shifted and drew back. Floating against a backdrop of unknown stars he saw the cone shape of a one man space battlecraft, of a type forgotten a hundred and fifty years before. The view moved in close and he saw a name, abraded by by dust and dimmed, but readable on the hull. He read it.

La Chasse Gallerie—The breath caught in his throat.

"It's been floating around in Laggi territory all this time?" Jim said. "I can't believe—"

"More than that," Mollen interrupted him. "That ship's under power and moving." A stud clicked. The original scene came-back. A bright line began at the extreme edge of the desk and began to creep toward the back limits of Laggi territory. It entered the territory and began to pass through.

"—You see," said Mollen's voice out of the dimness, "it's coming back from wherever the nova explosion kicked it to, nearly two hundred years ago. It's headed back toward our own territory. It's headed back, toward Earth."

Jim stared at the line in fascination.

"No," he heard himself saying, "it can't be. It's some sort of Laggi trick. They've got a Laggi pilot aboard—"

"Listen," said Mollen. "The probe heard talking inside the ship. And it recorded. Listen—"

Again, there was the faint snap of a stud. A voice a human voice, singing raggedly, almost absentmindedly to itself, entered the air of the room and rang on Jim's ears.

". . . *en roulant ma boule, roulant*—

en roulant ma boule, roulant . . ." the singing broke off and the voice dropped into a mutter of a voice in a mixture of French and English, speaking to itself, mixing the two languages indiscrimately. Jim, who had all but forgotten the little French he had picked up as a boy in Quebec, was barely able to make out that the possessor of the voice was carrying on a running commentary to the housekeeping duties he was doing about the ship. Talking to himself after the fashion of hermits and lonely men.

"Now, then," said Jim, even while he wondered why he was protesting such strong evidence at all. "Didn't you say they had the early semi-animate control systems then? They used brain tissue grown in a culture, didn't they? It's just the control system, parroting what

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it's heard, following out an early order to bring the ship back."

"Look again," said Mollen. The view changed once more to a closeup of *La Chasse Gallerie*. Jim looked and saw wounds in the dust-scarred hull—the slashing cuts of modern light weapons, refinements of the ancient laser bean-guns. "The ship's already had its first encounter with the Laggi on its way home. It met three ships of a Laggi patrol—and fought them off."

"Fought them off? That old hulk?" Jim stared into the dimness where Mollen's face should be. "Three modern Laggi ships?"

"That's right," said Mollen. "It killed two and escaped from the third—and by rights it ought to be dead itself, but it's still coming. A control system might record a voice and head a ship home, but it can't fight off odds of three to one. That takes a living mind."

A stud clicked. Dazzling overhead light sprang on again and the desk top was only a desk top. Blinking in the illumination, Jim saw Mollen looking across at him.

"Jim," said the General, "this is a volunteer mission. That ship is headed dead across the middle of Laggi territory and its going to be hit again before it reaches the Frontier. Next time it'll be cut to ribbons, or captured. We can't afford to have that happen. The pilot of that ship, this Raoul Penard, has too much to tell us, even beginning with the fact of how he happens to be alive at over two hundred years of age." He watched Jim closely. "Jim, I'm asking you to take a section of four ships in to meet *La Chasse Gallerie* and bring her out."

Jim stared at him. He found himself involuntarily wetting his lips and stopped the gesture.

"How deep?" he asked.

"At least a hundred and fifty years in toward the heart of Laggi territory," said Mollen, bluntly. "If you want to turn it down, Jim, don't hesitate. The man who pulls this off has got to go into it believing he can make it back out again."

"That's me," said Jim. He laughed, the bare husk of a laugh. "That's the way I operate, General. I volunteer."

"Good," said Mollen. He sat back in his chair. "There's just one more thing, then. Raoul Penard is older than any human being has a right to be and he's pretty certainly senile, if not out and out insane. We'll want a trained observer along to get as much information out of contact with the man as we can, in case you lose him and his ship, getting back. That calls for a man with a unique background and experience in geriatrics and all the knowledge of the aging process. Walt, here, is the man. He'll replace your regular gunner and ride in your two-man ship with you."

It was like a hard punch in the belly. Jim sucked in air and found he had jerked erect. Both men watched him. He waited a sec-

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ond, to get his voice under control. He spoke first to the general.

"Sir, I'll need a gunner. If there was ever a job where I'd need a gunner, it'd be this one."

"As a matter of fact," said Mollen, slowly—and Jim could feel that this answer had been ready and waiting for him, "Walt here is a gunner—a good one. He's a Captain in the Reserve, Forty-Second Training Squadron. With a ninety-two point six efficiency rating."

"But he's still a week-end warrior—" Jim swung about on the lean geriatrics man. "Have you ever done a tour of duty? Real duty? On the Frontier?"

"I think you know I haven't, Major," said Walt, evenly. "If I'd had you'd have recognized me. We're about the same age and there aren't that many on Frontier duty."

"Then do you know what it's like—what it can be like out there?" raged Jim. He knew his voice was getting away from him, scaling upward in tone, but he did not care. "Do you know how the bandits can come out of nowhere? Do you know you can be hit before you know anyone's anywhere near around? Or the ship next to you can be hit and the screens have to stay open—that's regulation, in case of some miracle—that there's something can be done? Do you know what it's like to sit there and watch a man you've lived with burning to death in a cabin he can't get out of? —Or spilled out of a ship cut wide open, and lost back there somewhere . . . alive but lost . . . where you'll never be able to find him? Do you know what it might be like to be spilled out and lost yourself and faced with the choice of living three weeks, a month, two months in your suit in the one in a million chance of being found after all—or of taking your cyanide capsules? Do you know what that's like?"

"I know it," said Walt. His face had not changed. "The same way you do, as a series of possibilities for the most part. I know it as well as I can without being wounded or dead."

"I don't think you do!" snapped Jim raggedly. His hands were shaking. He saw Walt looking at them.

"General," said Walt, "perhaps we should ask for another volunteer?"

"Jim's our best man," said Mollen. He had not moved, watching them both from behind the desk. "If I had a better man—or an equal man who was fresher—I'd have called him in instead. But what you're after is just about impossible; and only a man who can do the impossible can bring it off. Jim's that man. It's like athletic skills. Every so often a champion comes along, one in billions of people, who isn't just one notch up from the next contenders but ten notches up from the nearest. There's no point in sending you

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and five ships into Laggi territory with anyone else in command. You simply wouldn't come back. With Jim, you . . . may."

"I see," said Walt. He looked at Jim. "Regardless, I'm going."

"And you're taking him, Jim," said Mollen, "or turning down the mission."

"And if I turn it down?" Jim darted a glance at the general.

"I'll answer that," said Walt. Jim looked back at him. "If necessary, my Bureau will requisition a ship and I'll go alone."

Jim stared back at the other for a long moment, and felt the rage drain slowly away from him, to be replaced by a great weariness.

"All right," he said. "All right, Walt—General. I'll head the mission." He breathed deeply and glanced over Walt's civilian suit. "How long'll it take you to get ready?"

"I'm ready now," said Walt. He reached down to the floor behind the desk and came up with a package of personals, sidearm, med-kit and cyanide box. "The sooner the better."

"All right. The five ships of the Section are manned and waiting for you," said Mollen. He stood up behind the desk and the two younger men got to their feet facing him. "I'll walk down to Transmission Section with you."

They went out together into the corridor and along it and down an elevator tube to a tunnel with a moving floorway. They stepped on to the gently rolling strip, which carried them forward onto a slightly faster strip, and then to a faster, and so on until they were flashing down the tunnel surrounded by air pumped at a hundred and twenty miles an hour in the same direction they travelled, so that they would not be blown off their feet. In a few minutes they came to the end; and air and strips decelerated so that they slowed and stepped at last into what looked like an ordinary office, but which was deep in the heart of a mountain.—This, the memory returned to Jim, in case the Transmission Section blew up on one of its attempts to transmit. The statistical chance was always there. Perhaps, this time . . .?

But Mollen had cleared them with the officer of the duty guard and they were moving on through other rooms to the suiting room, where Jim and Walt climbed into the unbelievably barrel-bodied suits that were actually small spaceships in themselves and in which—if they who wore them were unlucky and still would not take their cyanide—they might drift in space, living on recycled air and nourishments until they went mad, or died of natural causes.

—Or were found and brought back. The one in a million chance. Jim, now fully inside his suit, locked it closed.

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"All set?" it was Mollen's voice coming at him over the aud circuit of the suit. Through the transparent window of the headpiece he saw the older man watching him.

"All set, General." He looked over at Walt and saw him already suited and waiting. Trying to make points by being fast, thought Jim sardonically. With the putting on of the suit, the old feeling of sureness had begun to flow back into him, and he felt released. "Let's go, bodysnatcher."

"Good luck," said Mollen. He did not comment on the name Jim had thrown at the geriatrics man. Nor did Walt answer. Together they clumped across the room, waited for the tons-heavy explosion door to swing open, and clumped through.

On the floor of the vast cavern that was the takeoff area, five two-man ships sat like grey-white darts, waiting. Red 'manned' lights glowed by each sealed port on the back four. Jim read their names as he stumped forward toward the open port of the lead ship, his ship, the *Fourth Mary*. The other four ships were the *Swallow*, the *Fair Maid*, the *Lela* and the *Andfriend*. He knew their pilots and gunners well. The *Swallow* and the *Andfriend* were ships from his own command. They and the other two were good ships handled by good men. The best.

Jim led the way aboard the *Fourth Mary* and fitted himself into the forward seat facing the controls. Through his suit's receptors, he heard Walt sliding into the gunner's seat, behind and to the left of him. Already, in spite of the efficiency of the suit, he could feel the faint, enclosed stink of his own body sweat, and responding to the habit of many missions, his brain began to clear and come alive. He plugged his suit into the controls.

"Report," he said. One by one, in order, the *Swallow*, the *Fair Maid*, the *Lela* and the *Andfriend* replied. "—Transmission Section," said Jim, "this is Wander Section, ready and waiting for transmission."

"Acknowledged," replied the voice of the Transmission Section. There followed a short wait, during which as always Jim was conscious, as if through some extra sense, of the many-tons weight of the collapsed magnesium alloy of the ship's hulls bearing down on the specially reinforced concrete of the takeoff area. "Ready to transmit."

"Acknowledged," said Jim.

"On the count of four, then," said Transmission Section's calm, disembodied voice. "For Picket Nine, L Sector, Frontier Area, transmission of Wander Section, five ships. Counting now. Four. Three, . . ." the unimaginable tension that always preceeded transmission from one established point to another, began to build, a

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gearing-up of nerves that affected all the men on all the ships alike. "Two . . ." the voice of Transmission Section seemed to thunder at them along their overwrought nerves. "One . . ."

". . . Transmit!"

Abruptly, a wave of disorientation and nausea broke through them, and was gone. They floated in dark and empty interstellar space, with the stars of the Frontier Area surrounding them; and a new voice spoke in their ear.

"Identify yourself," it said. "Identify yourself. This is Picket Nine requesting identification."

"Wander Section. Five ships." Jim did not bother to look at his instruments to find the space-floating sphere that was Picket Nine. It was out there somewhere, with twenty ships scattered around, up to half a light year away, but all zeroed in on this reception point where he and the other four ships had emerged. Had Jim been a Laggi Wing or Picket Commander, he would not have transmitted into this area with twice twenty ships—no, nor with three times that many. "Confirm transmission notice from Earth? Five ship section for deep probe bandit territory. Wander Section Leader, speaking."

"Transmission notice confirmed Wander Section Leader," crackled back the voice from Picket Nine. "Mission confirmed. You will not deship. Repeat, not deship. Local Frontier area has been scouted for slipover, and data prepared for flash transmission to you. You will accept data and leave immediately. Please key to receive data."

"Major—" began the voice of Walt, behind him.

"Shut up," said Jim. He said it casually, without rancor, as if he was speaking to his regular gunner, Leif Molloy. For a moment he had forgotten that he was carrying a passenger instead of a proper gunman. And there was no time to think about it now. "Acknowledge," he said to Picket Nine. "Transmit data, please."

He pressed the data key and the light above it sprang into being and glowed for nearly a full second before going dark again. That, thought Jim, was a lot of data—at the high speed transmission at which such information was pumped into his ship's computing center. That was one of the reasons the new computing units were evolved out of solid-state physics instead of following up the development of the semi-animate brains such as the one aboard the ancient *La Chasse Gallerie*. The semi-animate brains—living tissue in a nutrient solution—could not accept the modern need for sudden high-speed packing of sixteen hours worth of data in the space of a second or so.

Also, such living tissue had to be specially protected against high accelerations, needed to be fed and

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trimmed—and it died on you at the wrong times.

All the time Jim was thinking this with one part of his mind, the other and larger part of his thinking process was driving the gloved fingers of his right hand. These moved over a bank of one hundred and twenty small black buttons, ten across and twelve down, like the stops on a piano-accordion, and with the unthinking speed and skill of the trained operator, he punched them, requesting information out of the body of data just pumped into his ship's computing center, building up from this a picture of the situation, and constructing a pattern of action to be taken as a result.

Evoked by the intricate code set up by combinations of the black buttons under his fingers, the ghost voice of the computing center whispered in his ear in a code of words and numbers hardly less intricate.

". . . transmit destination area one-eighty ell wye, Lag Sector L 49 c at point 12:5,-13:2, 64:5. Proceeding jumps 10 ell wye, at inclination z49 degrees Frontier midpoint. Optimum jumps two, .03 error-correctible . . ."

He worked steadily. The picture began to emerge. It would not be hard getting in. It was never hard to do that. They could reach *La Chasse Gallerie* in two tranmissions or jumps across some hundred and eighty light years of distance, and locate her in the area where she should then be, within an hour or so. Then they could—theoretically at least—surround her, lock on, and try to improve on the ten light years of jump it seemed was the practical limit of her pilot's or her control center's computing possibilities.

With modern trans-light drive, the problem was not the ability to move or jump any required distance, but the ability to compute correctly, in a reasonable time, the direction and distance in which the move should be made. Such calculations took in of necessity the position and movement of the ship about to make the jump and the position and movement of the destination area—this in a galaxy where everything was in relative movement, and only a mathematical fiction, the theoretical center-point of the galaxy from which all distances were marked and measured, was fixed.

The greater the distance, the more involved and time-consuming the calculation. The law of diminishing returns would set in, and the process broke down of its own weight—it took a lifetime to calculate a single jump to a destination it would not take quite a lifetime to reach by smaller, more easily calculable jumps. It was this calculation time-factor that made it impractical for the human and Laggi races to go around each others spatial territory. If we were

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all Raoul Penards, thought Jim grimly, with two hundred and more years of life coming, it'd be different. —The thought chilled him, he did not know why. He put it out of his mind and went back to the calculations.

The picture grew and completed. He keyed his voice to the other ships floating in dark space around him.

"Wander Leader to Wander Section," he said. "Wander Leader to Wander Section. Prepare to shift into bandit territory. Key for calculations pattern for first of two jumps. Acknowledge, all ships of Wander Section."

The transmit section of his control board glowed briefly as the *Swallow,* the *Fair Maid,* the *Lela* and the *Andfriend* pumped into their own computing centers the situation and calculations he had worked out with his own. Their voice came back, acknowledging.

"Lock to destination," said Jim. "Dispersal pattern K at destination. Repeat, pattern K, tight, hundred kilometer interval. Hundred kilometer interval." He glanced at the sweep second hand of the clock before him on his control board. "Transmit in six seconds. Counting. Five. Four. Three. Two. One. Transmit—"

Again, the disorientation, and the nausea.

Strange stars were around them.

"Check Ten," whispered Jim. It was the code for 'make next jump immediately'. "Three. Two. One. Transmit—"

Once again the wrench of dislocation. Nausea.

Darkness. They were alone amongst the enemy's stars. None of the other ships were in sight.

"Swallow . . ." came a whisper in his earphones as from somewhere unseen as a tight, short range, light-born beam touched the outside of the *Fourth Mary,* beaming its message to his ears. *"Fair Maid. Lela . . ."* a slightly longer pause. *"Andfriend."*

Andfriend was always a laggard. Jim had braced her pilot about it a dozen times. But now was not the hour for reprimands. They were deep in Laggi territory, and the alien alert posts would have already picked up the burst of energy not only from their transmit off the Frontier, but from the second jump to over a hundred light years deep in Laggi territory. Communication between the ships of the Section must be held to a minimum while the aliens were still trying to figure out where the second jump had landed the intruders.

Shortly, since they must know by now of the approximate position of *La Chasse Gallerie,* and have ships on the way to kill her, they would put two and two together and expect to find the intruders in the same area. But for the moment Wander Section, if it lay low and quiet, could feel it was safely hid-

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den in the immensities of enemy space.

Jim blocked off outside transmission, and spoke over the intercom to Walt.

"All right, bodysnatcher," he said. "What was it you wanted to say to me back at Frontier?"

There was a slight pause before the other's voice came back.

"Sir—"

"Never mind that," said Jim. "I don't count Reserve Officers as the real thing. As far as I'm concerned you're a civilian. What was it you wanted, Wa—bodysnatcher?"

"All right, Major," said the voice of Walt. "I won't bother about military manners with what I call you, and I won't bother with what you call me." There was a slight grimness of humor in the voice of the geriatrics man. "I wanted to say—I'd like to get in close enough to *La Chasse Gallerie,* so that we can keep a tight beam connection with her hull at all times and I can record everything Penard says from the time of contact on. It'll be important."

"Don't worry," said Jim. "He'll be along in a few minutes, if my calculations were right. And I'll put you right up next to him. We're going to surround him with our ships, lock him in the middle of us with magnetics, and try to boost out as a unit at something more practical than the little ten light year at a time jumps that seem to be all he's able to compute."

"You say he'll be along?" said Walt. "Why didn't we go directly to him?"

"And make it absolutely clear to the Laggi he's what we're after?" answered Jim. "As long as they don't know for sure, they have to assume we don't even know of his existence. So we stop ahead in his line of travel—lucky he's just plugging straight ahead without trying any dodges—and wait for him. We might even make it look like an accidental meeting to the Laggi—" Jim smiled inside the privacy of his suit's headpiece without much humor. "—I don't think."

"Do you think you can lock on him without too much trouble—"

"Depends," answered Jim, "on how fast he starts shooting at us when he sees us."

"Shooting at us?" there was incredulity in Walt's voice. "Why should he—oh." His voice dropped. "I see."

"That's right," said Jim, "we don't look like any human ship he knew about, and he's in territory where he's going to be expecting bandits, not friends."

"But what're you going to do, to stop him shooting?"

"They dug up the recognition signals of the Sixty Ships Battle," said Jim. "Just pray he remembers them. And they've given me a voice signal that my blinker lights can translate and flash at him in the code he was working under at

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the time of the Battle. Maybe it'll work, maybe it won't."

"It will," said Walt, calmly.

"Oh?" Jim felt harshness in his chest. "What makes you so sure?"

"It's my field, Major. It's my business to know how the aged react. And one of their common reactions is to forget recent events and remember the events of long ago. Their childhood. High points of their early life—and the Sixty Ships Battle will have been one of those."

"So you think Penard will remember?"

"I think so," said Walt. "I think he'll remember with almost hypnotic recall."

Jim grinned again, mirthlessly, privately in his suit.

"You'd better be right," he said. "It's one order of impossibility to pick him up and take him home. It's another to fight off the Laggi while we're doing it. To fight Penard at the same time would be a third order—and that's beyond mortal men."

"Yes," said Walt. "You don't like to think of man as anything but mortal, do you, Major?"

"Why, you—" Jim bit back the rest of the words that flung themselves into his throat. He sat rigid and sweating in his suit, his hand lying across the accessible flap that would let him reach in and draw his sidearm without losing atmosphere from inside the suit. This crum—this *crum*—he thought, that doesn't know what it's like to see men die . . . ! The impulse to do murder passed after a moment, leaving Jim trembling and spent. There was the sour taste of stomach acids in his mouth.

"We'll see," he said shakily over the intercom. "We'll see, bodysnatcher."

"Why put it in the future, Major?" said the voice of the other. "Why not tell me plainly what you've got against someone working in geriatrics?"

"Nothing," said Jim. "It's nothing to do with me. Let'm all live forever."

"Something wrong with that?"

"I don't see the point of it," said Jim. "You've got the average age up pushing a hundred. What good does it do?" His throat went a little dry. *I shouldn't talk so much,* he thought. But he went on and said it anyway. "What's the use of it?"

"People are pretty vigorous up through their nineties. If we can push it farther . . . Here's Penard who's over two hundred—"

"And what's the use of it? Vigorous!" said Jim, the words breaking out of him. "Vigorous enough to totter around and sit in the sunlight. —What do you think's the retirement age from Frontier duty?"

"I know what it is," said Walt. "It's thirty-two."

"Thirty-two." Jim sneered. "So you've got all these extra vigorous years of life for people, have you?

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If they're all that vigorous, why can't they ride a frontier ship after thirty-two? I'll tell you why, body-snatcher. It's because they're too old—too old physically, too old in the reflexes and the nerves! Snatch all the ancient bodies back from the brink of the grave, but you can't change that. So what good's your extra sixty-eight years?"

"Maybe you ought to ask Raoul Penard that," said Walt, softly.

A dark wave of pain and unhappiness rose inside Jim, so that he had to clench his teeth to hold it back from coming out in words.

"Never mind him," Jim said huskily. For a second it was as if he had been through it, himself, all the endless years, refusing to die, beating his ship back toward the Frontier, and the Solar System, at little jumps of ten light years length, apiece—and home. I'll get him home, thought Jim to himself—I'll get Penard to the home he's been after these two centuries if I have to take him through every Laggi Picket area between here and the Frontier. "Never mind him," Jim said again to Walt, "he was a fighter."

"He still is—" Walt was cut suddenly short by the ringing of the contact alarm. Jim's fingers slapped by reflex down on his bank of buttons and a moment later they swam up beside a dust-scarred cone-shape with the faded legend *La Chasse Gallerie* visible on its side.

In the same moment, the other ships of Wander Section were appearing on other sides of the ancient spaceship. Their magnetic beams licked out and locked—and held, a fraction of a second before *La Chasse Gallerie* bucked like a wild horse and tried to escape by a jump at trans-light speeds.

The mass of the five other ships held her back.

"Hold—" Jim was whispering into the headpiece of his suit and circuits were translating his old fashioned phrases into blinking signal lights beamed at the cone-shape ship. "Hold. This is Government Rescue Contingent, title Wander Section. Do not resist. We are taking you in tow—" the unfitness of the ancient word, jarred in Jim's mouth as he said it. "We're taking you in tow to return you to Earth Headquarters. Repeat. . . ."

The flashing lights went on spelling the message out, over and over again. *La Chasse Gallerie* ceased fighting and hung docilely in the matching net of magnetic forces. Jim got a talk beam touching on the aged hull.

". . . home," a voice was saying, the same voice he had heard recorded in Mollen's office. "Chez moi . . ." it broke into a tangle of French that Jim could not follow, and emerged in accented English with the cadence of poetry, ". . . *'Poleon, hees sojer never fight—more brave as dem poor habitants—Chenier, he try for*

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broke de rank—Chenier come dead immediatement . . ."

"*La Chasse Gallerie. La Chasse Gallerie,*" Jim was saying over and over, while the blinking lights on his hull transformed the words into a ship's code two centuries dead, "Can you understand me? Repeat, can you understand me? If so, acknowledge. Acknowledge . . ." There was no response from the dust-scarred hull, slashed by the Laggi weapons. Only the voice, reciting what Jim now recognized as a poem by William Henry Drummond, one of the early poets to write in the French accented English of the French-Canadian habitant in the late nineteenth century.

". . . *De gun dey rattle lak' tonnere—*" muttered on the voice, "*just bang, bang, bang! dat's way she go—*" abruptly the voice of Raoul Penard shifted to poetry in the pure French of another poem by a medieval prisoner looking out the tower window of his prison on the springtime. The shift was in perfect cadence and rhyme with the earlier line in dialectical English.

"*Le temps a laissé ton mantau—de vent, de froidure, et de pluie*"

"It's no use," said Walt. "We'll have to get him back to Earth and treatment, before you'll be able to get through to him."

"All right," said Jim. "Then we'll head—."

The moan of an interior siren blasted through his suit.

"Bandits" yelped the voice of *Andfriend.* "Five bandits, sector six—"

"Bandits. Two bandits, sector two, fifteen hundred kilometers—" broke in the voice of *Lela.*

Jim swore and slapped his fingers down on the buttons. With all ships locked together, his jump impulse was sorted automatically through the computer center of each one, so that they all jumped together in the direction and distance he had programmed. There was the wrench of feeling—and sudden silence.

The siren had cut off. The voices were silent. Automatic dispersal had taken place, and the other four ships were spreading out rapidly to distances up to a thousand kilometers on all sides, their receptors probing the empty space for half a light year in each direction, quivering, seeking.

"Looks like we got away," Walt's voice was eerie in its naturalness, breaking the stillness in Jim's headpiece. "Looks like they lost us."

"The hell they did!" said Jim, savagely. "They'll have unmanned detector probes strung out all the way from here to the Frontier. They know we're not going anyplace else."

"Then we better jump again—"

"Not yet! Shut up, will you!" Jim bit the words off hard at his lips. "The more they collect to hit us with here, the more we leave

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behind when we jump again. Sit still back there and keep your mouth shut. You're a gunner now, not a talker."

"Yes sir." There was no mockery in Walt's voice. This time Jim did not comment on the 'sir'.

The seconds moved slowly with the sweep hand of the clock in front of Jim. Inside the headpiece, his face was dripping with perspiraton. The blood creaked in his ears—.

Moan of siren!

"Bandits!" shouted the *Fair Maid*. "Four bandits—"

"Bandits!" —"Bandits!" . . . Suddenly the helmet was full of warning cries from all the ships. The tell-tale sphere in front of Jim came alive with the green dots of Laggi ships, over and beyond the white dots of his own Section.

They came on, the green dots, with the illusion of seeming to spread apart as they advanced. They came on and . . .

Suddenly they were gone. They had winked out, disappeared as if they had never been there in the first place.

"Formation Charlie," said Jim tonelessly to the other four ships. They shifted their relative positions. Jim sat silent, sweat dripping off his chin inside his suit. He could feel the growing tension in the man behind him.

"Jump!" It was a whisper torn from a raw throat in Walt. "Why don't you jump?"

"Where to, bodysnatcher?" whispered back Jim. "They'll have planet-based computers the size of small cities working on our probabilities of movement, now. Anywhere we jump now in a straight line for the Frontier, they'll be waiting for us."

"Then jump to a side point. Evade!"

"If we do that," whispered Jim, "we'll have to recalculate." He suddenly realized the other's whispering had brought him to lower his own voice to a thread. Deliberately he spoke out loud, but with transmission of the conversation to the other ships of the Section blocked off. "Recalculation takes time. They'll be using that time to find us—and they've got bigger and better equipment for it than the computing centers aboard these little ships."

"But what're we waiting for? Why'd they go away? Shouldn't we go now—"

"No!" snarled Jim. "They went away because they thought there weren't enough of them."

"Not enough? There were twice our number—"

"Not enough," said Jim. "They want to kill us all at one swat. They don't want any of us to escape. It's not just *La Chasse Gallerie*. Enemy ships can't be allowed to get this deep into their territory and live. We'd do the same thing if Laggi ships came into our space. We'd have to make

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an object lesson of them—so they wouldn't be tempted to try again."

"But—"

"Bandits— Bandits! Bandits!—"

Suddenly the pilots of all the vessels were shouting at once. Jim's hand slammed down on a button and four screens woke to life, showing the interior of the other four ships. The sight and sound of the other pilots and gunners were there before his eyes.

The spherical tell-tale was alive with green dots, closing in from all sectors of the area, racing to englobe the Wander Section.

"James! Pattern James!" Jim heard his own voice shouting to the other ships. "James. Hit, break out, and check Ten. Check Ten. . . ."

They were driving toward one group of the approaching green lights. *La Chasse Gallerie* was driving with them. Over the shouting back and forth of the Wander Section Pilots came the voice of Raoul Penard, shouting, singing —a strange, lugubrious tune but in the cadence and tone of a battle song. As if through the winds of a nightmare, Jim heard him . . .

"Frainchman, he don't lak to die in de fall!

"When de mairsh she am so full of de game!

"An de little bool-frog, he's roll veree fat . . .

An de leetle mooshrat, he's jus' de same! . ."

The slow and feeble lasers of the old ship reached out toward the oncoming Laggi lights that were ships, pathetically wide of their mark. Something winked up ahead and suddenly the soft, uncollapsed point of the primitive, dust-scarred hull was no longer there. Then Wander Section had closed with some eight of the enemy.

The *Fourth Mary* suddenly bucked and screamed. Her internal temperature suddenly shot up momentarily to nearly two hundred degrees as a glancing blow from the light-weapon of one of the Laggi brushed her. There was a moment of insanity. Flame flickered suddenly in the interior of *Fair Maid,* obscuring the screen before Jim, picturing that interior. Then they were past the enemy fifteen and Jim cried—"Transmit!" at the same time that he locked his own magnetic beams on the chopped hull of *La Chasse Gallerie* and tried to take her through the jump alone.

It should not have been possible. But some sixth sense in the singing, crazed mind of Raoul Penard seemed to understand what Jim was trying. The two ships jumped together under the *Fourth Mary's* control, and suddenly all five ships floated within sight of each other amid the peace and darkness of empty space and the alien stars.

Into this silence came the soft

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sound of sobbing from one of the screens. Jim looked and saw the charred interior of the *Fair Maid.* Her pilot was out of his seat and half-crouched before the charred, barrel-suited figure in the gunner's chair.

"*Fair Maid!*" Jim had to repeat the call, more sharply. "*Fair Maid!* Acknowledge!"

The pilot's headpiece lifted. The sobbing stopped.

"*Fair Maid* here." The voice was thick-tongued, drugged-sounding. "I had to shoot my gunner, Wander Leader. He was burning up inside his suit. I had to shoot my gunner. He was burning up inside his—"

"*Fair Maid!*" snapped Jim. "Can you still compute and jump?"

"Yes . . ." said the drugged voice. "I can compute and jump, Wander Leader."

"All right, *Fair Maid,*" said said Jim. "You're to jump wide—angle off outside Laggi territory and then make your own way back to our side of the Frontier. Have you got that? Jump wide, and make your own way back. Jump far enough so that it won't be worth the Laggi's trouble to go after you."

"No!" The voice lost some of its druggedness. "I'm staying, Wander Leader. I'm going to kill some—"

Fair Maid!" Jim heard his own voice snarling into his headpiece. "This Section has a mission—to bring back the ship we've just picked up in Laggi territory. You're no good on that mission—you're no good to this Section without a gunner. Jump wide and go home! Do you hear me? That's an order. Jump wide and go home!"

There was a moment's silence, and then the pilot's figure moved slowly and turned slowly back to sit down before his controls.

"Acknowledge, *Fair Maid!*" snapped Jim.

"Acknowledge," came the lifeless voice of the pilot in the burned interior of the ship. "Jumping wide and going home."

"Out then," said Jim, in a calmer voice, "Good luck getting back. So long, Jerry."

"So long, Wander Leader," came the numb reply. The gloved hands moved on the singed controls. *Fair Maid* vanished.

Jim sat back wearily in his pilot's chair. Hammering into his ears came the voice of Raoul Penard, now crooning another verse of his battle song . . .

". . . *Come all you beeg Canada man*

"*Who want find work on Meeshegan,*

"*Dere's beeg log drive all troo our lan',*

You sure fin' work on Meesh—"

In a sudden reflex of rage, Jim's hand slapped down on a button, cutting off in mid-word the song from *La Chasse Gallerie.*

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"Major!"

The word was like a whip cracking across his back. Jim started awake to the fact of his passenger-gunner behind him.

"Well, bodysnatcher!" he said. "Who's been feeding you raw meat?"

"I think I've got my second wind in this race," answered the even, cold voice of Walt. "Meanwhile, how about turning Penard back on? My job's to record everything I can get from him, and I can't do that with the talk beam between us shut off."

"The *Fair Maid's* gunner just died—"

"Turn the talk beam on!"

Jim reached out and turned it on, wondering a little at himself. I should feel like shooting him at this moment, he thought. Why don't I? Penard's voice sang at him once again.

"Look," Jim began. "When a man dies and a ship is lost—"

"Have you looked at Penard's ship, Major?" interrupted the voice of Walt. "Take a look. Then maybe you'll understand why I want the talk beam on just as long as there's any use."

Jim turned and looked at the screen that showed the cone-shaped vessel. He stared.

If *La Chasse Gallerie* had been badly cut up before, she was a floating chunk of scrap now. She had been slashed deep in half a dozen directions by the light beams of the Laggi ships. And the oldfashioned ceramet material of her hull, built before collapsed metals had been possible, had been opened up like cardboard under the edge of red-hot knives. Jim stared, hearing the voice of Penard singing in his ears, and an icy trickle went down his perspiration-soaked spine.

"He can't be alive," Jim heard himself saying. If a hit that did not even penetrate the collapsed metal hull of the *Fair Maid* could turn that ship's interior into a charred, if workable, area—what must those light weapons of the enemy have done to the interior of the old ship he looked at now? But Raoul still sang from it his song about lumbering in Meeshean.

"—Nobody could be alive in that," Jim said. "I was right. It must be just his semi-animate control system parroting him and running the ship. Even at that, it's a miracle its still working—"

"We don't know," Walt's voice cut in on him. "And until we know we have to assume it's Raoul himself, still alive. After all, his coming back at all is an impossible miracle. If that could happen, it could happen he's still alive in that ship now. Maybe he's picked up some kind of protection we don't know about."

Jim shook his head, forgetting that probably Walt could not see this silent negative. It was not

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possible that Penard was alive. But—he roused himself back to his duty. He had a job to do.

His fingers began to dance over the black buttons in their ranks before him, working out the situation, planning his next move.

"K formation," he said automatically to the other ships, but did not even glance at the tell-tale sphere to make sure they obeyed correctly. Slowly, the situation took form. He was down one ship, from five to four of them, and that reduced the number of practical fighting and maneuvering formations by a factor of better than three. And there was something else . . .

"Walt," he said, slowly.

"Yes, Major?"

"I want your opinion on something," said Jim. "When we jumped out of the fight area just now, it was a jump off the direct route home and to the side of nearly sixty light years. I had to try to pick up *La Chasse Gallerie* and bring her with us. Penard let me do that without fighting me with his own controls. Now, what I want to know is—and it's almost unimaginable that he's got power on that hulk, anyway, but he obviously has—will he let me move him from now on without fighting me, once I slap a magnetic on him? In other words, whether he's a man or a semi-animate control, was that a fluke last time, or can I count on it happening again?"

Walt did not answer immediately. Then . . .

"I think you can count on it," he said. "If Raoul Penard is alive in there, the fact that he reacted sensibly once should be an indication he'll do it again. And if you're right about it being just a control center driving that ship, then it should react consistently in the same pattern to the same stimulus."

"Yeah . . ." said Jim softly. "But I wonder which it is—is Penard in there, alive or dead? Is it a man we're trying to get out? Or a control center?"

"Does it matter?" said the level voice of Walt.

Jim stiffened.

"Not to you, does it, body-snatcher?" he said. "But I'm the man that has to order men to kill themselves to get that ship home." Something tightened in his throat. "You know that's what hit me when I first saw you in Mollen's office, but I didn't know what it was. You haven't got guts inside you, you've got statistical tables and a computer."

He could hear his own harsh breathing in the headpiece of his suit as he finished talking.

"You think so?" said Walt's voice, grimly. "And how about you, Major? The accidents of birth and change while you were growing up gave you a one-in-billions set of mind and reflexes. You were born to be a white

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knight and slay dragons. Now you're in the dragon-slaying business and something's gone wrong with it you can't quite figure out. Something's gone sour, hasn't it?"

"Shut up!" said Jim, sweating. He felt his gloved hand resting on the access flap to his sidearm inside the suit. *I'm within my rights,* the back of his mind told him, crazily, *regulations provide for it. The pilot of a two man ship is still the captain with the power of life and death in emergency over his crew even if that crew is only one man. If I shot him and gave a good reason, they might suspect, but they couldn't do anything . . .*

"No," said Walt. "You've been going out of your way ever since you laid eyes on me to provoke this—now listen to it. Your nerves are shot, Major. You're a bad case of combat fatigue; but you won't quit and you're so valuable that people like Mollen won't make you quit."

"Play-party psychiatrist, are you?" demanded Jim through gritted teeth. Walt ignored him.

"You think I didn't have a chance to look at your personal history before I met you?" said Walt. "You know better than to think that. You're a Canadian yourself, and your background is Scotch and French. That's all anyone needs to know to read the signs—and the signs all read the same way. Your ship's named the *Fourth Mary.* And the Fourth Mary was the one that died, remember—" Abruptly he quoted from the old Scots ballad. *"Last night there were four Marys—tonight there'll be but three—".*

"Shut up!" husked Jim, the words choking in his throat.

"The signs read dead, Major. All of them, including the fact you hate me for being in the business of trying to make people live longer. It was victory over evil you wanted in the first place—like the evil that makes men burn and die in their frontier ships. Victory, or death. And now that you've been worn down to the conclusion that you can't win that victory, you want death. But you're not built right for suicide. That's the trouble—"

Jim tried to speak, but the strained muscles of his throat let out only a little, wordless rasp of

"—Death has got to come and take you, Major," said Walt. There was a trace of something like brutality in his voice. "And he's got to come take you against the most of your strength, against all your fighting will. He's got to take you in spite of yourself. —*And Death can't do it!* That's what's wrong with you, isn't it, Major?" Walt paused. "That's why you don't want to grow old and be forced to leave out here, where Death lives."

Walt's voice broke off. Jim sat, fighting for breath, his gloved fingers trembling on the access flap to the sidearm. After a little, his

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breath grew deeper again; and he forced himself to turn back to his computations. Aside from the habit-instructed section of his mind that concerned itself with this problem, the rest of him was mindless.

I've got to do something, he thought. *I've got to do something.* But nothing would come to mind. Gradually the careening vessel of his mind righted itself, and he came back to a sense of duty—to Wander Section and his mission. Then suddenly a thought woke in him.

"Raoul Penard's dead," he said quite calmly to Walt. "Somehow, what we've been hearing and what we've been watching drive and fight that ship is the semi-animate control center. How it got to be another Raoul Penard, doesn't matter. The tissue they used kept growing, and no one ever thought to keep one of them in contact with a man twenty-four hours a day for his lifetime. So it's the alter-ego, the control center we've got to bring in. And there's a way to do that."

He paused and waited. There was a second of silence, and then Walt's voice spoke.

"Maybe I underestimated you, Major."

"Maybe you did," said Jim. "At any rate, here it is. In no more than another half hour we're going to be discovered here. Those planet-based big computers have been piling up data on our mission here and on me as Leader of the Section, and their picture gets more complete every time we move and they can get new data. If we dodged away from here to hide again, next time they'd find us even faster. And in two more hides they'd hit us almost as soon as we got hid. So there's no choice to it. We've got to go for the Frontier, now."

"Yes," said Walt. "I can see we do."

"You can," said Jim. "And the Laggi can. Everybody can. But they also know I know that they've got most of the area from here to the Frontier covered. Almost anywhere we come out, they'll be ready to hit us within seconds, with ships that are simply sitting there, ready to make jump to wherever we emerge, their computations to the forty of fifty areas within easy jump of them already computed for them by the big planet-based machines. So, there's only one thing left for me to do, as they see it.—Go wide."

"Wide?" said Walt. He sounded a trifle startled.

"Sure," said Jim, grinning mirthlessly to himself in the privacy of his suit. "Like I sent *Fair Maid.*—But there's a difference between us and *Fair Maid.* We've got *La Chasse Gallerie.* And the Laggi'll follow us. And we'll have to keep running—outward until their edge in data lets them catch

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up with us. And their edge in ship numbers finishes us off. The Laggi ships won't quit on our trail—even if it means they won't get back themselves. As I said a little earlier, enemy ships can't be allowed to get this deep into their territory and get home again."

"So you're going wide," said Walt. "What's the use? It just puts off the time—"

"I'm not going wide." Jim grinned privately and mirthlessly once more. "That's what the Laggi think I'll do, hoping for a miracle to save us. I'm going instead where no one with any sense would go—right under their weapons. I've computed two jumps to the Frontier which is the least we can make it in. We'll lock on and carry *La Chasse Gallerie;* and we come out of the jump, we'll come out shooting. Blind. We'll blast our way through whatever's there and jump again as fast as we can. If one of us survives, that'll be all that's necessary to lock on to *La Chasse Gallerie* and jump her to the Frontier. If none of us does—well, we've done our best."

Once more he paused. Walt said nothing.

"Now," said Jim, grinning like a death's head. "If that was a two hundred year old man aboard that wreck of a ship there, and maybe burned badly or broken up by what he's been through so far, that business of jumping and coming out at fighting accelerations would kill him. But," said Jim, drawing a deep breath. "It's not a man. It's a control center. And a control center ought to be able to take it. —Have you got anything to say, Walt?"

"Yes," said Walt, quietly. "Officially I protest your assumption that Raoul Penard is dead, and your choice of an action which might be fatal to him as a result."

Jim felt a kind of awe stir in him.

"By—" he broke off. "Bodysnatcher, you really expect to come out of this alive, don't you?"

"Yes," said Walt, calmly. "I'm not afraid of living—the way you are. —You don't know it, Jim, but there's a lot of people like you back home, and I meet them all the time. Ever since we started working toward a longer life for people, they've turned their back on us. They say there's no sense in living a longer time—but the truth is they're afraid of it. Afraid a long life will show them up as failures, that they won't have death for an excuse for not making a go of life."

"Never mind that!" Jim's throat had gone dry again. "Stand to your guns. We're jumping now—and we'll be coming out shooting." He turned swiftly to punch the data key and inform his four remaining other ships. ". . . Transmitting in five seconds. Five. Four. Three. Two. One. Transmit—"

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Disorientation. Nausea . . .

The stars were different. Acceleration hit like a tree trunk ramming into Jim's chest. His fingers danced on the sub-light control buttons. The voice of Raoul Penard was howling his battle-song again—

". . . When you come drive de beeg saw log,
"You got to jump jus' lak de frog!
De foreman come, he say go sak!
"You got in de watair all over your back! . . ."

"Check Ten!" shouted Jim. "All ships check Ten. Transmit in three seconds. Three. Two—"

No Laggi ships in the tell-tale sphere—

Suddenly the *Fourth Mary* bucked and slammed. Flame flickered for a fraction of a second through the cabin. The tell-tale was alive with green lights, closing fast.

Fifteen of them or more . . . Directly ahead of the *Fourth Mary* were three of them in formation, closing on her alone. In Jim's ears rang the wild voice of Penard . . .

"P'raps you work on drive, tree-four day—
"You find dat drive dat she don' pay . . ."

"Gunner!" cried Jim, seeing the green lights almost on top of him. It was as desperate as a cry for help. In a moment—

Two of the green lights flared suddenly and disappeared. The third flashed and veered off.

"Bodysnatcher!" yelped Jim, suddenly drunk on battle delight. "You're a gunner! A real gunner!"

"More to the left and up—sector ten—" said a thick voice he could hardly recognize as Walt's, in his ear. He veered, saw two more green lights. Saw one flare and vanish—saw suddenly one of his own white lights flare and vanish as the scream of torn metal sounded from one of the screens below him. Glancing at the screens, he saw for the moment the one picturing *AndFriend*'s cabin, showing the cabin split open, emptied and flattened for a second before the screen went dark and blank.

Grief tore at him. And rage.

"Transmit at will!" he howled at the other ships. "Check Ten! Check Ten—"

He slapped a magnetic on the battered cone shape that fled by a miracle still beside him and punched for the jump—.

Disorientation. Nausea. And—

The stars of the Frontier. Jim stared into his screens. They floated in empty space, three grey-white dart shapes and the ravaged cone of *La Chasse Gallerie*. *Lela* rode level with Jim's ship, but *Swallow* was slowly turning sideways like a dying fish drifting in the ocean currents. Jim stared into the small screen showing the *Swallow*'s interior. The two suited

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figures sat in a blackened cabin, unmoving.

"*Swallow!*" said Jim, hoarsely. "Are you all right? Acknowledge. Acknowledge!"

But there was no answer from the two figures, and the Swallow continued to drift, turning, as if she was sliding off some invisible slope into the endless depths of the universe. Jim shook with a cold, inner sickness like a chill. They're just unconscious, he thought. They have to be just unconscious. Otherwise they wouldn't have been able to make the jump to here.

"*—Brigadier!*" the voice of Penard was singing with strange softness—

"*. . . repondit Pandore*
"*Brigadier! vous avez raison,*
"*Brigadier! repondit Pandore*
"*Brigadier! vous avez raison!—*"

Jim turned slowly to look in to the screen showing *La Chasse Gallerie*. He stared at what he saw. If the old ship had been badly slashed before, she was a ruin now. Nothing could be alive in such a wreck. Nothing. But the voice of Penard sang on.

"No . . ." muttered Jim out loud, unbelievingly. "Not even a semi-animate control center could come through that. It couldn't—"

"Identify yourself!" crackled a voice suddenly on Jim's ears. "Identify yourself! This is Picket Six, B Sector, Frontier area."

"Wander Section—" muttered Jim, still staring at the tattered cone-shape of *La Chasse Gallerie*. He remembered the original legend about the return of the dead voyageurs in their ghost canoe, and a shiver went down his back. "Wander Section, returning from deep probe and rescue mission into Laggi territory. Five ships with two lost and one sent wide and home, separately. Wander Leader, speaking."

"Wander Leader!" crackled the voice from Picket Six. "Alert has been passed all along the Frontier for you and your ships and orders issued for your return. Congratulations, Wander Section and welcome back."

"Thanks Picket Six," said Jim, wearily. "It's good to be back, safe on this side of the Frontier. We had half the Laggi forces breathing down our—"

A siren howled from the control board, cutting him off. Unbelieving, Jim jerked his head about to stare at the tell-tale sphere. It was filled with the white lights of the ships of Picket Six in formation spread out over a half light-year of distance. But, as he watched, green lights began to wink into existence all about his own battered Section. By sixes, by dozens, they were jumping into the area of Picket Six on the human side of the Frontier.

"Formation B! Formation B!" Jim found himself shouting at the

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Lela and the *Swallow*. But only the *Lela* responded. The *Swallow*, lost to ordinary vision, was on its long, drowning fall into nothingness still. "Cancel that. *Lela*, follow me. Help me carry *La Chasse*—"

His voice was all but drowned out by transmissions from Picket Six.

"Alert General. Alert General! All Pickets, all Sectors!" Picket Six was calling. "Full fleet Laggi attack. Three wings enemy forces already in this area. We are overmatched! Repeat. We are overmatched! Alert General—"

At maximum normal acceleration, the *Fourth Mary* and *Lela* with *La Chasse Gallerie* caught in a magnetic grip between them, were running from the enemy ships, while Jim computed frantically for a jump to any safe area, his fingers dancing on the black buttons.

"Alert General! All ships Picket Six hold until relieved. All ships hold! Under fire here at Picket Six. We are under—" the voice of Picket Six went dead. There was a moment's silence and then a new voice broke in.

"—This is Picket Five. Acknowledge, Picket Six. Acknowledge!" Another moment of silence, then the new voice went on. "All ships Picket Six. This is Picket Five taking over. Picket Five taking over. Our ships are on the way to you now, and the ships from other Sectors. Hold until relieved! Hold until relieved—"

Jim fought the black buttons, too busy even to swear.

"Wander Section! Wander Section!" shouted the voice of Picket Five. "Acknowledge!"

"Wander Section. Acknowledging!" grunted Jim.

"Wander Section! Jump for home. Wander Leader, key for data. Key to receive data, and Check Ten. Check Ten."

"Acknowledge!" snapped Jim, dropping his own slow computing. He keyed for data, saw the data light flash and knew he had received into his computing center the information for the jump back to Earth. "Hang on *Lela!*" he shouted. "Here we go—"

He punched for jump.

Disorientation. Nausea. And . . .

Peace.

The *Fourth Mary* lay without moving under the landing lights of a concrete pad in the open, under the nightime sky and the stars of Earth. The daylight hours had passed while Wander Section had been gone. Next to the *Fourth Mary* lay the dark, torn shape of *La Chasse Gallerie,* and beyond the ancient ship lay *Lela*. Three hundred light years away the Frontier battle would still be raging. Laggi and men were out there dying, and they would go on dying until the Laggi realized that Wander Section had finally made good

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its escape. Then the Laggi ships would withdraw from an assault against a Frontier line that two hundred and more years of fighting had taught was unbreachable by either combattant. But how many, thought Jim with a dry and bitter bleakness, would die before the withdrawal was made?

He punched the button to open the port of the Fourth Mary, and got clumsily to his feet in the bulky suit. During the hours just past, he had forgotten he was wearing it. Now, it was like being swaddled in a mattress. He was as thoroughly wet with sweat as if he had been in swimming with his clothes on.

There was no sound coming from *La Chasse Gallerie*. Had the voice of Raoul Penard finally been silenced? Sodden with weariness, Jim could not summon up the energy even to wonder about it. He turned clumsily around and stumbled back through the ship four steps and out the open port, vaguely hearing Walt Trey rising and following behind him.

He stumped heavy-footed across the concrete toward the lights of the Receiving Section, lifting like an ocean liner out of a sea of night. It seemed to him that he was a long time reaching the door of the Section, but he kept on stolidly, and at last he passed through and into a desuiting room. Then attendants were helping him off with his suit.

In a sort of dream he stripped off his soaked clothing and showered, and put on a fresh jumper suit. The cloth felt strange and harsh against his arms and legs as if his body as well as what was inside him had been rubbed raw by what he had just been through. He walked heavily on into the debriefing room, and dropped heavily into one of the lounge chairs.

A debriefing officer came up to him, and sat down in a chair opposite, turning on the little black recorder pickup he wore at his belt. The debriefing officer began asking questions in the safe, quiet monotone that had been found least likely to trigger off emotional outbursts in the returned pilots. Jim answered slowly, too drained for emotion.

". . . No," he said at last. "I didn't see *Swallow* again. She didn't acknowledge when I called for Formation B, and I had to go on without her. No, she never answered after we reached the Frontier."

"Thank you, Major." The debriefing officer got to his feet, clicking off his recorder pickup, and went off. An enlisted man came around with a tray of glasses half filled with brownish whisky. He offered it first to the pilot and the gunner of the Lela, who were standing together on the other side of the room with a debriefing officer. The two men took their glasses absentmindedly and drank

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from them without reaction, as if the straight liquor in them had been water. The enlisted man brought his tray over to where Jim sat.

Jim shook his head. The enlisted man hesitated.

"You're supposed to drink it, sir," he said. "Surgeon's orders."

Jim shook his head again. The enlisted man went away. A moment later he came back followed by a major with the caduceus of the Medical Corps on his jacket lapel.

"Here, Major," he said to Jim, taking a glass from the tray and holding it out to Jim. "Down the hatch."

Jim shook his head, rolling the back of it against the top of the chair he sat in.

"It's no good," he said. "It doesn't do any good."

The Medical Corps major put the glass back on the tray and leaned forward. He put his thumb gently under Jim's right eye and lifted the lid with his forefinger. He looked for a second, then let go and turned to the enlisted man.

"That's all right," he said. "You can go on."

The enlisted man took his tray of glasses away. The doctor reached into the inside pocket of his uniform jacket and took out a small silver tube with a button on its side. He rolled up Jim's right sleeve, put the end of the tube against it and pressed the button.

Jim felt what seemed like a cooling spray against the skin of his arm. And something woke in him, after all.

"What're you doing?" he shouted, struggling to his feet. "You can't knock me out now! I've got two ships not in yet. The *Fair Maid* and the *Swallow*—" The room began to tilt around him. "You can't—" his tongue thickened into unintelligibility. The room swung grandly around him and he felt the medical Major's arms catching him. And unconsciousness closed upon him like a trap of darkness.

He slept, evidently for a long time, and when he woke he was not in the bed of his own quarters but in the bed of a hospital room. Nor did they let him leave it for the better part of a week, and when he did, it was to go on sixty days leave. Nonetheless, he had had time, lying there in the peaceful, uneventful hospital bed, to come to an understanding with himself. When he got out he went looking for Walt Trey.

He located the geriatrics man finally on the secret site where *La Chasse Gallerie* was being probed and examined by the Geriatrics Bureau. Walt was at work with the crew that was doing this, and for some little time word could not be gotten to him; and without his authorization, Jim could not be let in to see him.

Jim waited patiently in a shiny,

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sunlit lounge until a young man came to guide him in to the interior of a vast building where *La Chasse Gallerie* lay dwarfed by her surroundings and surrounded by complicated items of equipment. It was apparently a break period for most of the people working on the old ship, for only one or two figures were to be seen doing things with this equipment outside the ship. The young man shouted in through the open port of *La Chasse Gallerie,* and left. Walt came out and shook hands with Jim.

There were dark circles under Walt's eyes and he seemed thinner under the loose shirt and slacks he wore.

"—Sorry to hear about *Swallow,"* he said.

"Yes," said Jim, a little bleakly, "they think she must have drifted back into Laggi territory. The unmanned probes couldn't locate her, and the Laggi may have taken her in. That's what chews on you of course, not knowing if her pilot and gunner were dead or not. If they were, then there's nothing to think about. But if they weren't . . . we never know what becomes of them—" He broke off that train of thought with a strong effort of will. *"Fair Maid* made it in, safely. Anyway, it wasn't about the Section I came to see you."

"No," Walt looked at him sympathetically. "It was about Raoul Penard you came, wasn't it?"

"I couldn't find out anything. Is it—is he, alive?"

"Yes," said Walt. "He's alive."

"Can you get through to him? —What came to me," said Jim, quickly, "while I was resting up in the hospital, was that I finally began to understand the reason behind all his poetry-quoting, and such. It struck me that he must have started all that deliberately. To remind himself of where he was trying to get back to. To make it sharp and clear in his mind so he couldn't forget it."

"Yes," said Walt nodding. "You're right. He wanted insurance against quitting, against giving up."

"I thought so. You were right—bodysnatcher," Jim grinned with slight grimness at the other man. "I'd been trying to quit myself. Or find something that could quit me. You were right all the way down the line. I am a dragon-slayer. I was born that way, I'm stuck with it and I can't change it. I want to go through the Laggi, or around them and end this damn murderous stalemate. But I can't live long enough. None of us can. And so I wanted to give up."

"And you aren't now?"

"No," said Jim, slowly. "It's still no use, but I'm going to keep hoping—for a miracle."

"Miracles are a matter of time," said Walt. "To make yourself a millionaire in two minutes is just about impossible. To make it in

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two hundred years is practically a certainty." That's what we're after in the Bureau. If we could all live as long as Penard, all sorts of things would become possible."

"And he's alive!" said Jim, shaking his head slowly. "He's really alive! I didn't even want to believe it, it was so far-fetched. Jim broke off. "Is he—"

"Sane? No," said Walt. "And I don't think we'll ever be able to make him so. But maybe I'm wrong. As I say, with time, most near-impossiblities become practicabilities." He stepped back from the open port of *La Chasse Gallerie,* and gestured to the interior. "Want to come in?"

Jim hesitated.

"I don't have a Secret clearance for this project—" he began.

"Don't worry about it," interrupted Walt. "That's just to keep the news people off our necks until we decide how to handle this. Come on."

He led the way inside. Jim followed him. Within, the ancient metal corridor leading to the pilot's compartment seemed swept clean and dusted shiny, like some exhibit in a museum. The interior had been hung with magnetic lights, but the gaps and tears made by Laggi weapons let almost as much light in. The pilot's compartment was a shambles that had been tidied and cleaned. The instruments and control panel were all but obliterated and the pilot's chair half-gone. A black box stood in the center of the floor, an incongruous piece of modern equipment, connected by a thick grey cable to a bulkhead behind it.

"I wasn't wrong, then," said Jim, looking around him. "No human body could have lived through this. It was the semi-animate control center that was running the ship as Penard's alter ego, then, wasn't it? The man isn't really alive?"

"Yes," said Walt, "and no. You were right about the control center somehow absorbing the living personality of Penard. —But look again. Could a control center like that, centered in living tissue floating and growing in a nutrient solution with no human hands to care for it—could something like that have survived this, either?"

Jim looked around at the slashed and ruined interior. A coldness crept into him and he thought once more of the legend of great ghost cargo canoe sailing through the snow-filled skies with its dead crew, home to the New Year's feast of the living.

"No . . ." he said slowly, through stiff lips. "Then . . . where is he?"

"Here!" said Walt, reaching out with his fist to strike the metal bulkhead to which the gray cable was attached. The dull boom of the struck metal reverberated on Jim's ears. Walt looked penetratingly at Jim.

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"You were right," said Walt, "when you said that the control center had become Penard—that it *was* Penard, after the man died. Not just a record-full of memories, but something holding the vital, decision-making spark of the living man himself. —But that was only half the miracle. Because the tissue living in the heart of the control center had to die, too, and just as the original Penard knew he would die, long before he could get home, the tissue-Penard knew it too. But their determination, Penard's determination, to do something, solved the problem."

He stopped and stood staring at Jim, as if waiting for some sign that he had been understood.

"Go on," said Jim.

"The control system," said Walt, "was connected to the controls of the ship itself through an intermediate solid stage element which was the grandfather of the wholly inanimate solid-state computing centers in the ships you drive nowdays. The link was from living tissue through the area of solid-state physics to gross electronic and mechanical controls."

"I know that," said Jim. "Part of our training—"

"The living spark of Raoul Penard, driven by his absolute determination to get home, passed from him into the living tissue of the semi-animate controls system," went on Walt, as if Jim had not spoken. "From there it bridged the gap by a sort of neurobiotaxis into the flow of impulse taking place in the solid state elements. Once there, below all gross levels, there was nothing to stop it infusing every connected solid part of the ship."

Walt swept his hand around the ruined pilot's compartment.

"This," he said, "is Raoul Penard. And this!" Once more he struck the bulkhead above the black box. "The human body died. The tissue activating the control center died. But Raoul came home just as he had been determined to do!"

Walt stopped talking. His voice seemed to echo away into the silence of the compartment.

"And doing it," said Walt, more quietly, "he brought home the key we've been hunting for in the Bureau for over two hundred years. It's pulled the plug on a dam behind which there's been piling up a flood of theory and research. What we needed to know was that the living human essence could exist independent of the normal human biochemical machinery. Now, we know it. It'll take a little time, but soon it won't be necessary for the vital element of anyone to admit extinction."

But Jim was only half listening. Something else had occurred to him, something so poignant it contracted his throat painfully.

"Does he know?" Jim asked. "You said he's insane. But does he

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know he finally got here? Does he know he made it—home?"

"Yes," said Walt. "We're sure he does. Listen . . ."

He reached down and turned a control on the black box. And softly the voice of Raoul Penard came out of it, as if the man was talking to himself. But it was a quieter, happier talking to himself than Jim had heard before. Raoul was quoting one of the poems of William Henry Drummond, again. But this time it was a poem entirely in English and there was no trace of accent in the words at all. . . .

"O, Spirit of the mountain that speaks to us to-night, "Your voice is sad, yet still recalls past visions of delight, "When 'mid the grand old Laurentides, old when the Earth was new, "With flying feet we followed the moose and caribou.

"And backward rush sweet memories, like fragments of a dream, "We hear the dip of paddles . . ."

Raoul's voice went on, almost whispering, contentedly to itself. Jim looked up from listening, and saw Walt's eyes fixed on him with a strange, hard look he had not seen before.

"You didn't seem to follow me, just now," said Walt. "You didn't seem to understand what I meant. You're one of our most valuable lives, the true white knight that all of us dream of being at one time or another, but only one in billions actually succeeds in being born to be."

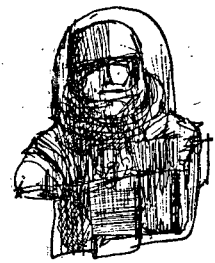
Jim stared back at him.

"I told you," he said. "I can't help it."

"That's not what I'm talking about," said Walt. "You wanted to go out and fight the dragons, but life was too short. But what about now?"

"Now?" echoed Jim, staring at him. "You mean—me?"

"Yes," said Walt. His face was strange and intense, with the intensity of a crusader, and his voice seemed to float on the soft river of words flowing from the black box. "I mean you. What are you going to be doing, a thousand years from today?" ◄



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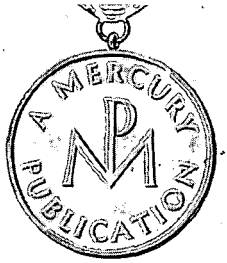

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